Gilman Springs Road Bridge Replacement Project

RIVERSIDE COUNTY, CALIFORNIA

Bridge No. 56C-0523
08–RIV–Gilman Springs Road
Federal Project Number: BRLS 5926(238)

Draft Initial Study with Proposed Mitigated Negative Declaration



Prepared for:
County of Riverside Transportation Department
3525 14th Street
Riverside, CA 92501

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July 2026

Project Information

Pursuant to: Division 13, Public Resources Code

Project Proponent:	County of Riverside Transportation Department 3525 14th Street, Riverside, California 92501
Project Title:	Gilman Springs Road Bridge Replacement Project
Project Location:	The Project is located approximately 0.5 mile southeast of the State Route (SR) 79/Gilman Springs Road Interchange in unincorporated Riverside County, north of the City of San Jacinto. The existing bridge carries Gilman Springs Road over Potrero Creek near the base of Massacre Canyon.
Project Description:	The County of Riverside Transportation Department (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Gilman Springs Road Bridge over Potrero Creek (Bridge Number 56C-0523) (Project). The Project is programmed as part of the Highway Bridge Program (HBP). The Project proposes to replace the existing two-lane bridge along Gilman Springs over Potrero Creek with a new two-lane bridge. The new bridge would be located slightly southwest of the existing two-lane bridge alignment. Along with replacing the aging bridge, the Project would realign the roadway to improve the operational characteristics and geometrics related to the bridge and roadway approaches.
Findings	Pursuant to the provisions of the California Environmental Quality Act (CEQA), the County has determined that the Project would not have a significant effect on the environment. Following an Initial Study and assessment of possible adverse impacts, the Project was determined not to have a significant impact on the environment. Therefore, the County has prepared a Mitigated Negative Declaration (MND) in accordance with the provisions of CEQA.
Mitigation Measures:	Refer to Sections 2.1 through 2.20 of this Initial Study and to Appendix C, *Mitigation Monitoring and Reporting Program*.

A copy of the Initial Study is available for review at the following location:
County of Riverside Transportation Department, 3525 14th Street, Riverside, 92501

In addition, a copy of the Initial Study is available for review at the following website:
https://trans.rctlma.org/gilman-springs-road-bridge

In addition, the Initial Study can be obtained by emailing Don Copeland at dcopelan@rivco.org.

Please submit your comments on this Initial Study with Proposed Mitigated Negative Declaration in writing no later than August 12, 2026, to Don Copeland, County of Riverside Transportation Department, 3525 14th Street, Riverside, CA 92501, or dcopelan@rivco.org.

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The County of Riverside Transportation Department (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Gilman Springs Road Bridge over Potrero Creek (Bridge Number 56C-0523) (Project). The Project is programmed as part of the Highway Bridge Program (HBP). The Project proposes to replace the existing two-lane bridge along Gilman Springs over Potrero Creek with a new two-lane bridge. The new bridge would be located slightly southwest of the existing two-lane bridge alignment. Along with replacing the aging bridge to mitigate scour issues, the Project would realign the roadway to improve sight distance and permit an increase in the speed limit and, hence, improve traffic flow. The County is the Lead Agency under the California Environmental Quality Act (CEQA).

Determination

Pursuant to the provisions of CEQA and the State and local CEQA guidelines, the County is the Lead Agency and charged with the responsibility of deciding whether to approve the Project. This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the County's intent to adopt an MND for this Project. This does not mean that the County's decision regarding the Project is final. This MND is subject to modification based on comments received by interested agencies and the public.

An Initial Study has been prepared for this Project; pending public review, the County expects to determine from this study that the Project would not have a significant effect on the environment for the following reasons:

The Project would have no effect on the following resources.

- Aesthetics, Agricultural and Forestry Resources, Energy, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation Resources

The Project would have a less-than-significant effect on the following resources.

- Air Quality; Cultural Resources; Geology, Soils, and Paleontological Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; Transportation; Utilities and Service Systems; and Wildfire

The Project would have less-than-significant effects with mitigation for Biological Resources and Tribal Cultural Resources. Mitigation measures for impacts on these resource areas are as follows.

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MM BIO-8, Revegetation of Disturbed Areas

Soil and vegetation disturbance will be minimized. Post-construction, any disturbed areas remaining as bare ground will be returned to original or better conditions.

To ensure that all areas remaining as bare ground post-construction are returned to original or better conditions, the following requirements will be met:

- Affected areas will be returned to natural contour grades, decompacted to eliminate compressed soils and allow for plant establishment, and replanted and/or hydroseeding, using native species sourced from a reputable nursery in the local area.

- Replanting may occur through hydroseeding and/or the use of container plantings, depending on the affected area and previous conditions prior to disturbance.

- All revegetated areas will avoid the use of any species listed on the California Invasive Plant Council's (Cal-IPC's) California Invasive Plant Inventory or in Table 6-2 of the Western Riverside County Multiple Species Conservation Plan (MSHCP), Volume 1, Section 6.

For temporarily disturbed areas containing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and/or Additional Reserve Lands (ARL), the following additional requirements must also be met:

- All temporarily impacted riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and ARL will be returned to original conditions or better through onsite restoration at a 1:1 ratio.

- Onsite, in-kind restoration of these affected areas would occur at their current locations upon completion of construction.

- A Habitat Mitigation and Monitoring Plan (HMMP) and Restoration Plan will be prepared for temporary impact areas containing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and/or ARL and must meet the following requirements:

    - Detailed specific onsite revegetation criteria, including, but not limited to, seed mix/potted plant size, planting palette, and stock sources; site preparation; planting techniques; watering requirements; plans to remove and control invasive plant species; requirements for maintenance and monitoring; success criteria metrics; identification of responsible parties; reporting requirements; and remedial measures in the event that revegetation standards are not met.

    - Detailed restoration plans and specifications with performance standards and monitoring requirements to ensure that the functions and values of the existing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and ARL are replaced with equivalent or superior resources.

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- Implementation for 5 years, with the potential for early sign-off as determined by Western Riverside County Regional Conservation Authority (RCA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW).

- Success criteria in the Habitat Mitigation and Monitoring Plan must include trapping and documentation to confirm that Los Angeles pocket mouse has re-occupied all habitat with long-term conservation value for the species that overlaps with existing ARL (not proposed ARL) once restoration has been completed.

- Reviewed and approval by RCA, USFWS, and CDFW prior to project implementation, including any vegetation removal, equipment staging, or ground disturbance.

MM BIO-24, Aquatic Resources Mitigation

Mitigation for permanent impacts on jurisdictional aquatic resources will occur on site as a result of the beneficial aspects of expanding the bridge length, which will involve expanding and recontouring the channel, extending the abutments, and removing old fill (including rock riprap). This would increase the aquatic resources habitat by at least a 3:1 ratio by converting uplands to stream channel, which will achieve a no net loss of riparian/riverine resources. No offsite mitigation for permanent impacts is proposed. Temporary impacts on jurisdictional aquatic resources will be replaced in-kind at a 1:1 ratio at their current locations through onsite restoration of the temporarily affected area to pre-project conditions (e.g., natural grade recontouring, decompacted soils, replanting of native species via hydroseeding and/or container planting; see **MM BIO-8** for details).

MM BIO-25, Riparian/Riverine Resources Mitigation

Mitigation for permanent impacts on riparian/riverine resources will occur on site as a result of the beneficial aspects of expanding the bridge length, which will involve expanding and recontouring the channel, extending the abutments, and removing old fill (including rock riprap). This would increase the riverine habitat by at least a 3:1 ratio by converting uplands to stream channel, which will achieve a no net loss of riparian/riverine resources. No offsite mitigation for permanent impacts is proposed.

MM TCR-1

Due to the general sensitivity of the project area, the County of Riverside will retain a Native American Monitor to provide monitoring during ground-disturbing activities in areas of previously undisturbed and native soils.

One Native American Monitor will be present during ground-disturbing activities in areas of previously undisturbed and native soils.

If multiple tribes request to provide monitoring, tribal monitoring will be scheduled on an alternating basis between the Consulting Tribes. Tribal Monitors scheduled by the County will be compensated. In addition, if a tribe wishes to have a tribal representative

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onsite to observe ground-disturbing activities when its Tribal Monitor is not scheduled to work on the project, the tribe may do so at its own expense.

The Native American Monitor will only be present onsite during construction that involves ground-disturbing activities such as, but not limited to, boring, grading, excavation, trenching, or drilling within previously undisturbed and native soils.

Native American monitoring will not occur for work activities that include the demolition and removal of nonnative materials, such as existing concrete, asphalt pavement, and pavement base layers, or ground-disturbing activities that occur within previously disturbed areas.

Attendance by Native American Monitors during construction of the project is at the discretion of the tribe, and the absence of a Native American Monitor, should the tribes choose to forgo monitoring for some reason, will not delay work.

The Native American Monitor will complete daily monitoring logs that provide descriptions of construction activities, locations, soil, and any cultural materials identified.

If a potential cultural resource is discovered, the Native American Monitor will immediately notify the archaeologist, construction foreman, and the County; and work will stop within 60 feet of the find. The Qualified Archaeologist, in cooperation with the Native American Monitor, will use flagging tape, rope, or some other means, as necessary, to delineate the area of the find, plus a 60-foot buffer, within which construction will halt.

Native American monitoring will end when ground-disturbing activities that have potential to unearth or impact potential cultural resources are completed or the Tribal Monitor has indicated that all upcoming ground-disturbing activities will not affect TCRs.

MM TCR-2

A tribal cultural resource (TCR) is a site, feature, place, cultural landscape, sacred place, or object that is of cultural value to a tribe and is either on or eligible for the California Register of Historic Resources or a local historic register, OR the Lead Agency, at its discretion, chooses to treat the resource as a TCR (See: PRC 21074 (a)(1)(A)-(B)).

If a potential TCR is unexpectedly discovered during construction, as per PRC 21074(a)(2), the County will determine if the resource is a TCR pursuant to criteria set forth in subdivision (c) of Section 5024.1. If potential TCRs are discovered during construction, all work must halt within a 60-foot radius of the discovery.

Any discovery is to be kept confidential and secure to prevent any further disturbance. There will be no publicity regarding any TCRs recovered.

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Isolates and clearly non-significant deposits will be documented in the field and collected so that monitored work can proceed. Otherwise, all potential TCRs unearthed by project construction activities will be evaluated by the Qualified Archaeologist in consultation with the Native American Monitor. Native American artifacts and finds suspected to be TCRs will be treated as such until the County has determined otherwise through consultation with Consulting Tribes. The County, Caltrans, and Consulting Tribes will determine mutually acceptable treatment of TCRs.

Construction will not take place within the delineated area of the TCR until either 1) mitigation measures have been agreed on between the County and the AB52 Consulting Tribes, pursuant to PRC Section 21080.3.2, and that mitigation is carried out; or 2) if agreement cannot be reached, one or more of the standard mitigation measures described in PRC Section 21084.3 is carried out.

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Signature:

Frances Segovia

Frances Segovia
Environmental Project Manager
County of Riverside Transportation Department

7/6/2026

Date

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Chapter 1 Proposed Project

1.1 Introduction

The County of Riverside Transportation Department (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Gilman Springs Road Bridge over Potrero Creek (Bridge Number 56C-0523) (Project). The Project is located approximately 0.5 mile southeast of the North Sanderson Avenue (State Route [SR-]79)/Gilman Springs Road Interchange in unincorporated Riverside County, California. Refer to Figure 1.1-1 for the regional vicinity and Figure 1.1-2 for the Project location. The existing bridge, which was originally built in 1926 and was partially reconstructed in 1949, has been jeopardized by scouring that has exposed footings and is in need of reconstruction. The Project would replace the existing two-lane bridge with a new two-lane bridge and reconstruct the connecting approach roadway on a geometrically improved alignment. The purpose of the Project is to replace the aging bridge to mitigate scour issues and to address roadway alignment deficiencies.

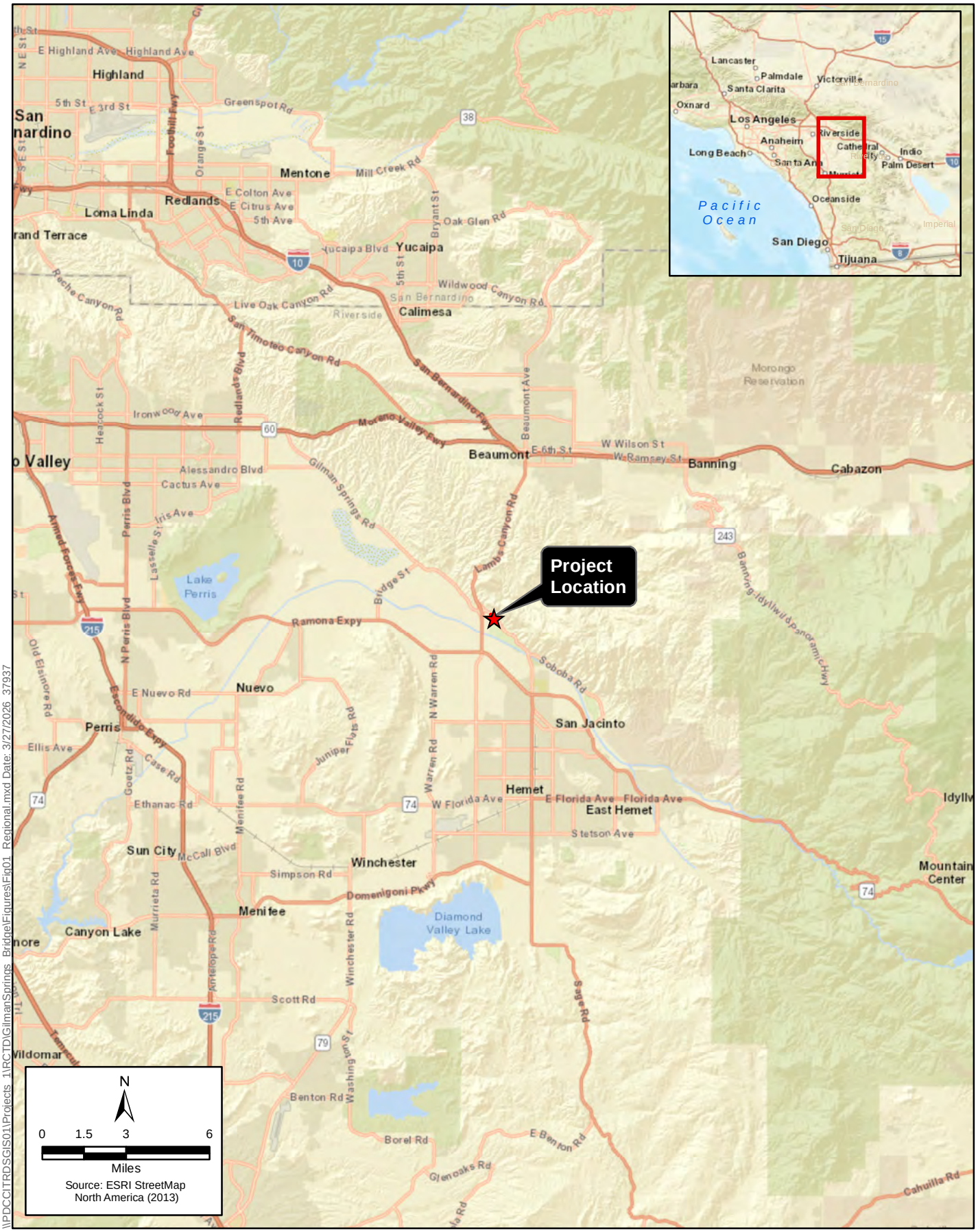
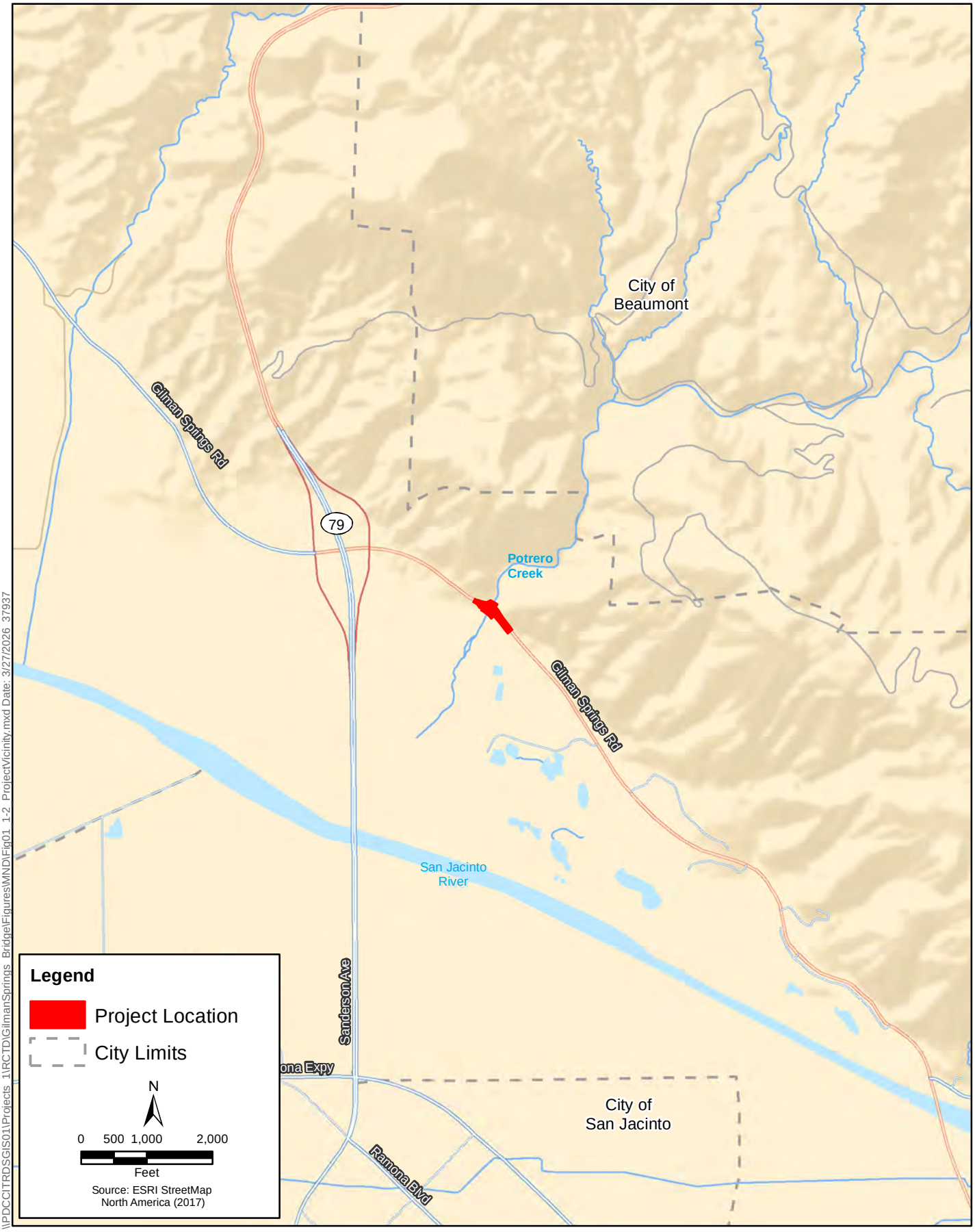


Figure 1.1-1
Regional Vicinity Map
Gilman Springs Road Bridge Replacement Project



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Figure 1.1-2
Project Vicinity
Gilman Springs Road Bridge Replacement Project

1.2 Environmental Setting

The Project site is at Gilman Springs Road Bridge (Bridge Number 56C-0523), located along Gilman Springs Road, approximately 0.5 mile southeast of the SR-79/Gilman Springs Road Interchange in unincorporated Riverside County, California (Figure 1.1-1 and Figure 1.1-2). The existing bridge carries Gilman Springs Road over Potrero Creek near the base of Massacre Canyon. Land use in the Project vicinity consists of primarily open, undeveloped use. Surrounding land uses include agriculture to the south and west, and natural, protected lands in the San Jacinto Mountains to the north and east, including the Potrero Unit of the California Department of Fish and Wildlife (CDFW) San Jacinto Wildlife Area. No business, residences, or other buildings are located directly adjacent to the Project.

Potrero Creek carries flows southwesterly from the San Jacinto Mountains and discharges to the San Jacinto River, which flows through Riverside County before draining into Lake Elsinore. Elevations at the proposed east and west bridge approaches are approximately 1,528 and 1,529 feet above mean sea level, respectively (Earth Mechanics, Inc. 2024). The Project site contains Gilman Springs Road, a relatively flat paved two-lane road. The area surrounding the road slopes downward in the center toward Potrero Creek, where the bridge crosses. Soils within the Project limits are all generally sandy loams, ranging from fine sandy loam to coarse sandy loam. The Project is in the San Jacinto Valley Area Plan (SJVAP) of the *County of Riverside General Plan*.

1.3 Project Purpose and Need

1.3.1 Purpose

The purpose of the Project is to achieve the following goals:

- Address the existing structural and hydraulic deficiencies related to the Gilman Springs Road Bridge.
- Improve the operational characteristics and geometrics related to the Gilman Springs Road Bridge and roadway approaches.

1.3.2 Need

The Gilman Springs Road Bridge was built in 1926 and partially reconstructed in 1949. This Project is needed because the existing bridge has scour issues that make the bridge structurally unstable, and the bridge is eligible for rehabilitation according to the Highway Bridge Program (HBP) Guidelines. The Project proposes to replace the existing two-lane bridge with a new two-lane bridge to mitigate scour issues and reconstruct the connecting approach roadway on a geometrically improved alignment. The Project would improve the Sufficiency Rating of the bridge by addressing structural and hydraulic deficiencies, thereby removing the Gilman Springs Road Bridge from the HBP Eligible Bridge List and improving the County's infrastructure report card. The Project would also improve the roadway geometrics to increase safety and to promote the flow of traffic.

1.4 Project Description

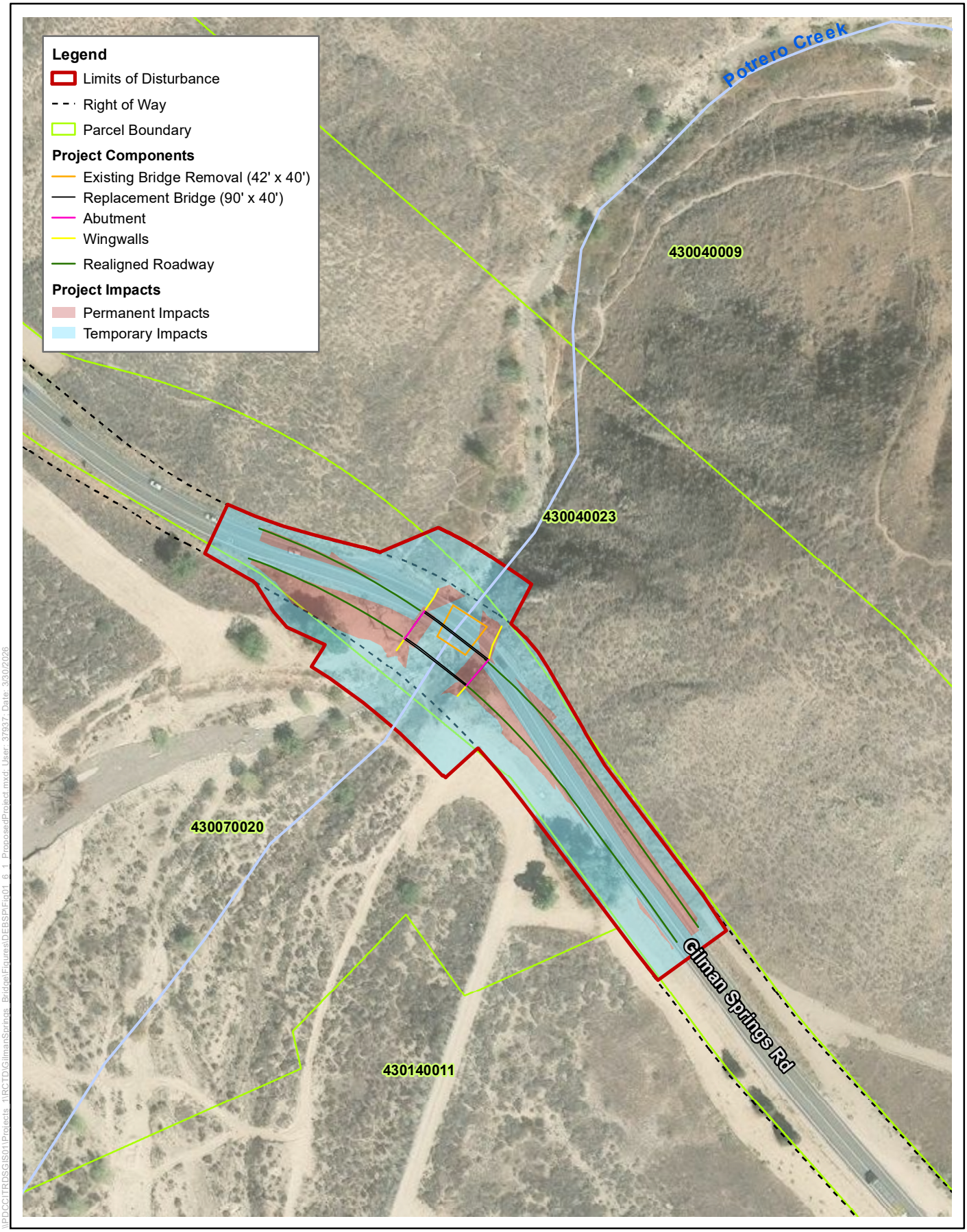
The County is proposing to replace the Gilman Springs Road Bridge over Potrero Creek (Bridge No. 56C-0523). The Project is programmed as part of the HBP under Project ID No. 4160, Federal Project No. BRLS-5926(238).

The Project is located approximately 0.5 mile southeast of the North Sanderson Avenue (SR-79)/Gilman Springs Road Interchange in unincorporated Riverside County, north of the City of San Jacinto. The existing bridge carries Gilman Springs Road over Potrero Creek near the base of Massacre Canyon. Gilman Springs Road is classified as a Secondary Highway in the *County of Riverside General Plan*. Throughout the Project corridor, Gilman Springs Road is a two-lane road with eastbound and westbound traffic. The average daily traffic (ADT) on the two-lane road is approximately 19,300 vehicles, based on 2016 traffic counts. The heavy traffic volumes combined with the poor roadway alignment have resulted in heavy congestion during peak hours and motorist safety concerns. In addition, when accidents or repairs divert traffic away from SR-79, traffic flow on the Gilman Springs Road is severely affected. A new roadway alignment would improve sight distance and permit an increase in the speed limit, therefore improving traffic flow.

Along with mitigating scour issues and addressing roadway alignment deficiencies, the Project would replace the aging bridge. The existing Gilman Springs Bridge was constructed in 1926 and widened in 1949, and it is nearing the end of its service life. The original bridge is a single-span, earthen-filled concrete arch bridge supported on a counterfort retaining wall with spread footings. The widened structure is a thinner arched slab bridge with an integral diaphragm type abutment supported on a strip spread footing. The original bridge is approximately 23 feet wide and 42 feet long. The widening increased the total bridge width to approximately 40 feet while maintaining the original span length.

The most recent Bridge Inspection Report (BIR) was prepared in 2022, which resulted in a Sufficiency Rating of 71.2 and a Scour Critical Flag. The BIR classifies the bridge in overall good condition, the substructure as fair, and deck geometry and approach roadway alignment as tolerable. Rehabilitating or replacing the bridge in its current alignment would not address the safety and traffic flow concerns associated with the alignment. A replacement bridge shifted to the southwest of the existing bridge would address geometric and structural deficiencies.

The new bridge would be slightly southwest of the existing two-lane bridge alignment (see Figure 1.4-1). The replacement bridge will be a two-lane, single-span cast-in-place, prestressed concrete box girder bridge. The span length is anticipated to be longer (approximately 90 feet long) to provide adequate hydraulic conveyance for Potrero Creek flows and to provide an appropriately sized wildlife crossing under the bridge. Because the replacement bridge would be single-span, no support structures would be placed within Potrero Creek.



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Figure 1.4-1
Proposed Project Components
Gilman Springs Road Bridge Replacement Project

Work within Potrero Creek is anticipated to include removing the existing bridge, constructing new bridge abutments, placing embankment walls, and grading the slopes of the creek for improved flow characteristics. Construction is anticipated to take approximately 2 years to complete and is anticipated to be completed in two stages while maintaining traffic on Gilman Springs Road. However, it is possible that a full roadway closure may be necessary during construction. This will be determined once the traffic analysis results are available. Nighttime construction is not expected but could occur.

The Project is being designed to utilize the existing County right of way, and temporary and permanent easements are not anticipated for the Project. Utility relocations and adjustments may be necessary (e.g., conduits attached to the bridge and power pole relocation). Any affected utilities would be relocated in accordance with State law and regulations and County policies.

1.5 Purpose of This Initial Study with Proposed Negative Declaration

The California Environmental Quality Act (CEQA) was enacted in 1970 for the purpose of providing decision-makers and the public with information regarding environmental effects of projects, identifying means of avoiding environmental damage, and disclosing to the public the reasons behind a project's approval, even if it leads to environmental damage. As the CEQA Lead Agency, the County has determined that the Project is subject to CEQA, and no exemptions apply. Therefore, preparation of an Initial Study is required.

The Initial Study is a preliminary analysis conducted by the Lead Agency, in consultation with other agencies (i.e., responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the Initial Study concludes that the project, with mitigation, may have a significant effect on the environment, an Environmental Impact Report should be prepared; otherwise, the Lead Agency may adopt a Negative Declaration or Mitigated Negative Declaration (MND).

This Initial Study has been prepared in accordance with CEQA (Public Resources Code [PRC] § 21000 et seq.) and the State CEQA Guidelines (Title 14, California Code of Regulations § 15000 et seq.).

1.6 Permits and Approvals Needed

Permits, approvals, or agreements from the agencies and organizations listed in Table 1-1 would be required prior to the commencement of Project activities.

Table 1-1 Permits, Reviews, and Approvals

Agency	Permit/Approval	Status
U.S Army Corps of Engineers (USACE)	Section 404 Nationwide Permit	Application for 404 permit expected after Final Environmental Document (FED) approval.

Agency	Permit/Approval	Status
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement	Application for 1602 permit expected after FED approval.
Regional Water Quality Control Board (RWQCB)	Clean Water Act (CWA) Section 401 Water Quality Certification	Application for 401 permit expected after FED approval.
	National Pollutant Discharge Elimination System (NPDES) Permit	Application for NPDES permit expected after FED approval.

Chapter 2 CEQA Checklist

Environmental Factors Potentially Affected

The environmental factor (s) checked below would be potentially affected by the Project, but impacts would be mitigated to a less-than-significant level, as indicated in the Initial Study.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
X	Biological Resources		Cultural Resources		Energy
	Geology/Soils/ Paleontological Resources		Greenhouse Gas Emissions		Hazards & Hazardous Materials
	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
	Noise		Population/Housing		Public Services
	Recreation		Transportation/Traffic	X	Tribal Cultural Resources
	Utilities/Service Systems		Wildfire	X	Mandatory Findings of Significance

Determination

On the basis of this initial evaluation:

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

Frances Segovia

Signature

Frances Segovia

Environmental Project Manager

Riverside County Transportation Department

7/6/2026

Date

2.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, 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?	☐	☐	☐	☒

2.1.1 Regulatory Setting

CEQA establishes that it is the policy of the State to take all action necessary to provide the people of the State "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (PRC § 21001(b)).

County of Riverside

County of Riverside General Plan

Multipurpose Open Space Element

The County recognizes the importance of scenic resources, including scenic corridors, as quality of-life components for residents of the County of Riverside. The *County of Riverside General Plan*, Multipurpose Open Space Element (County of Riverside 2015), contains the following policies relevant to visual resources:

- **OS 9.3.** Maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes.
- **OS 9.4**. Conserve the oak tree resources in the county.
- **OS 21.1**. Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County

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

Land Use Element

The County contains diverse and natural scenic views and corridors, many of which are viewed often along Riverside County's many roadways. As such, the County has officially recognized several roadways as either Designated or Eligible State or County Scenic Highways. The *County of Riverside General Plan*, Land Use Element (County of Riverside 2021a), contains the following policies relevant to the Project and aesthetics:

- **LU 14.1**. Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.
- **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.

Circulation Element

The *County of Riverside General Plan*, Circulation Element (County of Riverside 2020), contains the following policies relevant to the Project and aesthetics:

- **C 4.4**. Plan for pedestrian access that is consistent with road design standards while designing street and road projects. Provisions for pedestrian paths or sidewalks and timing of traffic signals to allow safe pedestrian street crossing shall be included.
- **C 4.6**. Consult the Riverside County Transportation Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. The County of Riverside may require both the dedication and improvement of the pedestrian facilities as a condition of development approval.
- **C 4.9**. Review all existing roadways without pedestrian facilities when they are considered for improvements to determine if new pedestrian facilities are warranted. New roadways should also be assessed for pedestrian facilities.
- **C 19.1**. Preserve scenic routes that have exceptional or unique visual features in accordance with Caltrans' Scenic Highways Plan.
- **C 20.1**. Ensure preservation of trees identified as superior examples of native vegetation within road rights-of-way through development proposals review process. Where the County of Riverside deems preservation to be infeasible, relocation and/or replacement shall be evaluated by a qualified arborist to ensure that impacts are mitigated.
- **C 20.10**. Avoid, where practicable, disturbance of existing communities and biotic resource areas when identifying alignments for new roadways, or for improvements to existing roadways and other transportation system improvements.

San Jacinto Valley Area Plan

The SJVAP (County of Riverside 2021b) contains the following policies relevant to the Project and aesthetics:

- **SJVAP 3.6.** Require the placement and design of roadways to be compatible with the natural character of the River corridor.
- **SJVAP 13.1.** Protect the scenic highways in the San Jacinto Valley Area Plan 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.

2.1.2 Discussion of Environmental Evaluation Question 2.1 – Aesthetics

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact.

The Project area provides views over the valley floor to the surrounding mountains and hillsides with few visual intrusions. However, no Caltrans officially designated vista points or any informal vista points used by the general public are associated with the Project corridor. The County defines Gilman Springs Road as a County Eligible Scenic Highway. SJVAP Policy 13.1 states, "Protect the scenic highways in the San Jacinto Valley Area Plan 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." Since there are no Caltrans officially designated vista points or any informal vista points used by the general public within the Project area, and because any potential nearby scenic vista points would not be affected by the Project due to the minor visual changes associated with the Project, there would be no significant visual impacts on scenic vistas.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact.

Gilman Springs Road and SR-79 (located approximately 0.5 mile from the bridge) are both Riverside County–designated County Eligible Scenic Highways (County of Riverside 2020). However, there are no eligible or officially designated State scenic highways within the Project area (Caltrans 2019). The Project is not within a State scenic highway; therefore, there will be no impacts on scenic highways.

c) Would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings in non-urbanized areas? Would the project conflict with applicable zoning and other regulations governing scenic quality in urbanized areas?

No Impact.

The Project would be located entirely within a rural area and, therefore, would not conflict with applicable zoning or other regulations governing scenic quality associated within an urbanized

area. Therefore, this analysis focuses on whether the Project would degrade the existing visual character or quality of the site and its surroundings in a non-urbanized area.

SJVAP Policy 3.6 states, "Require the placement and design of roadways to be compatible with the natural character of the River corridor." Visual changes along affected portions of Gilman Springs Road are expected to be minor because the proposed bridge would look very similar to the existing bridge. The slight roadway realignment and utility relocations are expected to result in very minor visual changes that are not expected to alter the visual character or quality of the landscape because they are very compatible with existing views along the Project corridor.

Vegetation removal associated with the Project is not expected to greatly alter the visual landscape or views of and from the roadway corridor because the area of impact is small, consists mainly of desert shrubs, and would be expected to naturally recolonize in a short period of time. A cottonwood tree would also be removed near the southeast bridge abutment. The *County of Riverside General Plan*, Circulation Element, states that "superior examples of native vegetation within road rights of ways should be preserved." Where the County deems preservation to be infeasible, relocation or replacement shall be evaluated by a qualified arborist to ensure that impacts are mitigated. However, the cottonwood tree is declining in health and is not, therefore, a notable visual resource contributing to the visual quality of the Project corridor.

The Project would also be visible from some points along SR-79. However, the proposed bridge replacement and roadway realignment are not anticipated to result in any changes to the visual character and quality views available from SR-79 because the Project as proposed would look very similar to existing conditions and vegetation removal would be minor. From SR-79, the minor visual changes would not likely be noticeable due to distance from the Project site and intervening vegetation that would obscure much of the Project. Therefore, the Project would not affect views of valley floor or views of the surrounding mountains for neighbors or travelers, nor would it be perceived negatively by these viewers. Additionally, implementation of **Standard Measures (SMs) VIS-1** through **SM VIS-4** (below) would avoid or further reduce any potential visual impacts resulting from Project construction. As a result, no impact on the existing visual character or quality of the site and its surroundings would occur.

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

No Impact.

There are no streetlights along the Project corridor, and vehicle headlights are the only sources of artificial lighting. Therefore, nighttime lighting levels associated with the Project corridor are very low. The Project would not introduce new sources of permanent nighttime lighting. Daytime glare levels are moderate because the adjacent hillsides cast shade on the roadway surface for large parts of the day. The proposed bridge and lane widths would, essentially, be of the same size and materials as existing conditions. Therefore, there is not expected to be any change in daytime or nighttime glare. No impact would occur.

2.1.3 Avoidance, Minimization, and Mitigation Measures

The following standard measures, which are standard measures/commitments for all Caltrans and County roadway projects, would be implemented to avoid or minimize potential impacts.

SM VIS-1

During construction, the construction contractor shall minimize tree and vegetation removals to the extent practicable.

SM VIS-2

During construction, the construction contractor shall ensure contour grading that integrates with the natural terrain to the extent feasible.

SM VIS-3

Post-construction, the construction contractor shall hydroseed disturbed areas, including staging areas and the section of road that is removed, with a seed mix that includes native species. Under no circumstances shall invasive plant species be used in any erosion control measures.

SM VIS-4

During construction, the construction contractor shall minimize fugitive light from portable sources used during construction.

2.2 Agricultural and Forestry Resources

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

2.2.1 Regulatory Setting

Federal

Farmland Protection Policy Act

Congress established the Farmland Protection Policy Act (FPPA) in 1981 to minimize the extent to which federal actions contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses. FPPA ensures that federal programs are compatible with State and local governments and private programs and policies to protect farmland. The Natural Resources

Conservation Service (NRCS) of the U.S. Department of Agriculture (USDA) is the primary agency responsible for implementing and administering the FPPA.

The Farm and Ranch Lands Protection Program (FRPP) and a corresponding rating system (Land Evaluation and Site Assessment) are part of the FPPA. Land Evaluation and Site Assessment is used as a tool to determine agricultural suitability of land compared to demands created by nonagricultural uses of the land. The FRPP is a voluntary program that provides funding to State, local, and tribal government entities and nongovernmental organizations with existing farmland protection programs to purchase conservation easements. A minimum 30-year term is required for conservation easements, of which the NRCS provides up to 50 percent of the fair market value of the easements. Participating agencies and organizations agree to keep their land designated as agricultural use and retain all property rights for future agricultural use. The requirements of the FRPP would apply if the project resulted in the conversion of farmland.

State

California Land Conservation Act of 1965 (Williamson Act)

CEQA requires analysis of a project to determine whether it would convert agricultural land, Williamson Act contract land, and forest land to other uses. The main purposes of the Williamson Act are to preserve agricultural land and encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

Farmland Mapping and Monitoring Program

The California Department of Conservation established the Farmland Mapping and Monitoring Program (FMMP) in 1982 to provide a consistent and impartial analysis of agricultural land use and land use conversion throughout California. The FMMP identifies farmlands in the State based on current land use information and soil survey data on soil characteristics that best support crop production as USDA and NRCS have compiled.

The Department of Conservation maintains the FMMP and monitors the conversion of farmland to and from agricultural use through its Important Farmland Inventory System. Farmlands are divided into the following categories based on their suitability for agriculture.

- **Prime Farmland**: This land has the best combination of physical and chemical characteristics (e.g., soil quality, growing season, moisture supply) for the long-term production of crops in high yields. This land also must have been used for irrigated agricultural production at some time during the 4 years prior to the mapping date.

- **Farmland of Statewide Importance**: This land does not meet the criteria for Prime Farmland, but it has a good combination of physical and chemical characteristics, albeit with minor shortcomings, such as greater slopes or reduced ability to store moisture. This land must also have been under irrigated production during the prior mapping date. Per

the *County of Riverside General Plan*, this category can include forest land, crop land, pastureland, rangeland, and other lands that are not urban or water.

- **Unique Farmland**: This is land other than the above categories that is currently used for the production of specific high-value food and fiber crops, such as citrus, avocados, and vegetables. This land may have lesser-quality soils, but it still has the combination of traits needed to produce high-quality or high yields of specific crops. This category may include non-irrigated orchards or vineyards and olives, avocados, or grapes, among others. The land must also have been cropped at some time during the prior mapping date.

- **Farmland of Local Importance**: This land generally does not qualify for any of the above categories, but it has been deemed locally important by the Riverside County Board of Supervisors. This land may also have been suitable for Prime or Statewide Importance designations, but for the lack of available irrigation water. The category can include lands in production of major, but not unique, crops, as well as dairy lands and agricultural zones (including contract lands and those in jojoba production).

- **Grazing Land**: This includes lands with existing vegetation that are suited for grazing livestock.

- **Other Land**: This refers to land not included in any other category. Commonly, this includes low-density rural developments (with five subcategories), brush and timberlands, wetlands and riparian areas, confined livestock, poultry, or aquaculture facilities, and/or strip mines. Also included are water bodies covering fewer than 40 acres and agricultural lands of fewer than 40 acres when surrounded by urban uses.

Regional and Local

County of Riverside

County of Riverside General Plan

The County recognizes the high socioeconomic value that agriculture has within Riverside County. The two major conservation rationales noted in the *County of Riverside General Plan* are to maintain the viability of the agricultural industry and preserve the resource represented by farmland—its productive soils and its secondary role as an open space amenity.

Multipurpose Open Space Element

The *County of Riverside General Plan*, Multipurpose Open Space Element (County of Riverside 2015), contains the following policy relevant to agricultural resources:

- **OS 7.4:** Encourage landowners to participate in programs that reduce soil erosion, improve soil quality, and address issues that relate to pest management. To this end, the County shall promote coordination between the Natural Resources Conservation Service, Resource Conservation Districts, UC Cooperative Extension, and other agencies and organizations.

Land Use Element

The County considers widespread and diverse agriculture lands to be one of the most important land uses in terms of historic character and economic strength. The *County of Riverside General Plan*, Land Use Element (County of Riverside 2021a), contains the following policies relevant to agricultural resources:

- **LU 20.1:** Encourage retaining agriculturally designated lands where agricultural activity can be sustained at an operational scale, where it accommodates lifestyle choice, and in locations where impacts to and from potentially incompatible uses, such as residential uses, are minimized, through incentives such as tax credits.
- **LU 20.2:** Protect agricultural uses, including those with industrial characteristics (dairies, poultry, hog farms, etc.) by discouraging inappropriate land division in the immediate proximity and allowing only uses and intensities that are compatible with agricultural uses.
- **LU 20.4:** Encourage conservation of productive agricultural lands. Preserve prime agricultural lands for high-value crop production.
- **LU 20.5:** Continue to participate in the California Land Conservation Act (the Williamson Act) of 1965.
- **LU 20.6:** Require consideration of state agricultural land classification specifications when a 2.5-year Agriculture Foundation amendment to the General Plan is reviewed that would result in a shift from an agricultural to a non-agricultural use.
- **LU 20.7:** Adhere to Riverside County's Right-to-Farm Ordinance.
- **LU 20.8:** Encourage educational and incentive programs in coordination with the Riverside County Agricultural Commissioner's Office, the University of California Cooperative Extension Service, and the Riverside County Farm Bureau, that convey the importance of conserving watercourses and their associated habitat, as well as protective buffers for domestic and farm livestock grazing.

San Jacinto Valley Area Plan

The SJVAP (County of Riverside 2021b) recognizes that agriculture has long been established in the San Jacinto Valley area. It is the intent of the SJVAP to recognize agriculture as an important economic activity in the region and to accommodate those agricultural owners who wish to continue their operations in the future. The SJVAP contains the following policy relevant to agricultural resources:

- **SJVAP 6.1:** Maintain particular attention to the Foundation Component designation and Certainty System procedures/findings with respect to the agricultural designations in the lower San Jacinto Valley. Reference the Agriculture section of the General Plan Land Use Element and the Agricultural Resources section of the Multipurpose Open Space Element.

County of Riverside Ordinances

Ordinance No. 509 (Establishing Agricultural Preserves)

Agricultural preserves are lands identified for, and devoted to, agricultural and compatible uses, and are established through resolutions adopted by the Riverside County Board of Supervisors.

The purpose of this ordinance is to ensure that incompatible uses are not allowed within established agricultural preserves. The ordinance sets forth the powers of the County of Riverside in establishing and administering agricultural preserves pursuant to the California Land Conservation Act of 1965 (California Government Code § 51200, et seq.). The ordinance also establishes uniform rules for the agricultural and compatible uses allowed in an agricultural preserve. Land uses not covered in the ordinance are prohibited within agricultural preserves.

Ordinance No. 625 (Right to Farm)

The purpose of this ordinance is to "conserve, protect and encourage the development, improvement and continued viability of 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." It seeks to "balance the rights of farmers to produce food and other agricultural products with the rights of nonfarmers who own, occupy or use land within or adjacent to agricultural areas." Consequently, the ordinance includes regulations for reducing the loss of agricultural resources in the County of Riverside by limiting the circumstances under which agricultural operations may be deemed a "nuisance." It states that an agricultural activity that has been operating for more than 3 years on a site (assuming it was not a nuisance at the time it began) cannot be later classed as a public or private nuisance due to "any changed condition in or about the locality." This prevents, for example, existing dairies from being targeted by odor complaints from residents of housing units constructed in the surrounding area 3 or more years after the dairy use began. Furthermore, it requires buyers of properties within 300 feet of any land zoned primarily for agricultural purposes to be given notice of the preexisting agricultural use and its right to continue.

Resolution No. 84-526 (Riverside County Rules and Regulations Governing Agricultural Preserves)

These rules and regulations were adopted pursuant to California Government Code Section 51231 to govern agricultural preserve procedures within Riverside County and to aid in implementation of the Williamson Act. The rules and regulations address procedures for the initiation, establishment, enlargement, disestablishment, and diminishment of agricultural preserves. To protect existing agricultural lands and agricultural preserves within Riverside County, Division VI of the rules requires a Comprehensive Agricultural Preserve Technical Advisory Committee (CAPTAC) to review and report on land use proposals and applications related to agricultural preserves and advise the Riverside County Board of Supervisors on the administration of agricultural preserves, as well as Williamson Act contract-related matters. In particular, CAPTAC is charged with reviewing any proposals for the diminishment or disestablishment of an agricultural preserve and providing its recommendations to the Board of Supervisors.

Regarding diminishments and disestablishments, CAPTAC reviews the following findings:

- Whether a notice of nonrenewal has been served pursuant to the Williamson Act, Section 401 of these rules
- Whether the cancellation is likely to result in the removal of adjacent lands from agricultural use

- Whether the proposed alternative use of land is consistent with the provisions of the *County of Riverside General Plan*
- Whether the cancellation will result in discontinuous patterns of urban development
- Whether there is proximate noncontracted land that is both available and suitable for the use for which the contracted land is being proposed
- Whether the development of the contracted land would provide more contiguous patterns of urban development than development of proximate noncontracted land

2.2.2 Discussion of Environmental Evaluation Question 2.2 – Agricultural Resources

a) Would the project 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?

No Impact.

According to the State of California Department of Conservation (2024), the Project is within the Other Lands category. FMMP defines Other Lands as land not included in any other farmland category. Commonly, this includes low-density rural developments (with five subcategories), including brush and timberlands, wetlands and riparian areas, confined livestock, poultry or aquaculture facilities, and strip mines. Also included are water bodies covering fewer than 40 acres as well as vacant and agricultural lands that are surrounded by urban uses and are greater than 40 acres. There is no Prime Farmland or Farmland with Statewide or Local Importance within the Project's limits of disturbance (LOD). The Project LOD is along Gilman Springs Road in the immediate area of the existing Gilman Springs Bridge. The LOD includes the proposed roadway realignment, proposed replacement bridge, and potential construction staging areas and creek access points. Farmland of Local Importance is within 0.06 mile southwest of Project LOD. However, the Project would not result in the conversion of FMMP-designated farmlands to non-agriculture uses. The Project does not encroach upon any farmland and will not result in the conversion of any existing Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. Therefore, there would be no impact.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact.

Per the California Important Farmland Finder, the Project LOD is not under any Williamson Act contracts (California Department of Conservation 2024). There are also no Wiliamson Act lands within 0.5 mile of the Project site. No conflicts with Williamson Act contracts or with active agricultural land uses would occur under the Project. Therefore, no impacts are anticipated.

c) Would the project 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 Impact.

The Project does not involve the acquisition or conversion of any forest land, timberland, or timberland zoned as Timberland Production because there is no forest land or timberland within or surrounding the Project LOD. The Project would not conflict with the existing zoning or require rezoning of any forest land. Therefore, there would be no impact.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact.

The Project would not result in the loss or conversion of forest land because there is no forest land within the Project area and LOD. Therefore, there would be no impact.

e) Would the project 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?

No Impact.

The Project would include transportation facility improvements and the replacement of an existing bridge. There are no foreseen changes from the Project that would result in conversion of farmland to non-agricultural use or forest land to non-forest use. Therefore, there would be no impact.

2.2.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
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 non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

2.3.1 Regulatory Setting

Federal

The Clean Air Act (CAA) was first enacted in 1963 but has been amended numerous times in subsequent years (i.e., 1967, 1970, 1977, and 1990). The CAA establishes National Ambient Air Quality Standards (NAAQS) and specifies future dates for achieving compliance. The CAA also mandates that the states submit and implement a State Implementation Plan (SIP) for local areas not meeting those standards. The plans must include pollution control measures that demonstrate how the standards would be met. The Project area is within a basin designated as a nonattainment area for ozone (O_3) and particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$) and as a maintenance area for carbon monoxide (CO), particulate matter 10 micrometers or less in diameter (PM_{10}), and nitrogen dioxide under the CAA.

The 1990 amendments to the CAA identify specific emission-reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and the incorporation of additional sanctions for failure to attain or meet interim milestones. The sections of the CAA that would most substantially affect development of the Project include Title I (Nonattainment Provisions) and Title II (Mobile-Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for criteria pollutants. The Riverside County portion of the South Coast Air Basin (Basin), in which the Project is located, fails to meet national standards for O_3 and $PM_{2.5}$; therefore, it is considered a federal nonattainment area for those pollutants (EPA 2024).

State

The California Clean Air Act, signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. CAAQS incorporate additional standards for most criteria pollutants and set standards for other pollutants that the State recognizes (California Air Resources Board 2024). In general, State of California standards are more health-protective than the corresponding NAAQS. The State has also set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. The Basin is in attainment or unclassified with these California standards for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride, but it is a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$.

Local

The Project lies within the Riverside County portion of the Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD has jurisdiction over an area of approximately 10,743 square miles, including all of Orange County, Los Angeles County (except for Antelope Valley), the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County; the Basin is a subregion of SCAQMD jurisdiction. Although air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

SCAQMD has adopted a series of air quality management plans (AQMPs) to meet CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources, control programs for area sources and indirect sources, an SCAQMD permitting system designed to allow no net increase in emissions from any new or modified (i.e., previously permitted) emission sources, and transportation-control measures. The 2022 AQMP is the most recent AQMP adopted by the SCAQMD Governing Board on December 2, 2022 (SCAQMD 2022). The 2022 AQMP demonstrates that the Basin and the Coachella Valley meet the CAA requirements for the 70 parts per billion O_3 standard. The 2022 AQMP includes the integrated strategies and measures needed to meet the NAAQS.

To comply with the CAA in achieving NAAQS, SIPs are required to be developed for federal nonattainment and maintenance areas. In California, SIP development is a joint effort of the local air agencies and the California Air Resources Board (CARB) working with federal, State, and local agencies (including the Metropolitan Planning Organizations [MPOs]). The South Coast Air Basin Attainment Plan for the 2012 Annual $PM_{2.5}$ Standard is the most recent SIP adopted by the SCAQMD Governing Board on June 7, 2024 (SCAQMD 2024). AQMPs are prepared in response to federal and State requirements.

2.3.2 Discussion of Environmental Evaluation Question 2.3 – Air Quality

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

No Impact.

California is divided geographically into 15 air basins for the purpose of managing the State's air resources on a regional basis. Each air basin generally has similar meteorological and geographic conditions throughout. Local districts are responsible for preparing the portion of the SIP applicable within their boundaries for achieving attainment of ambient air quality standards, as required under the CAA. The Project is in the South Coast Air Basin; SCAQMD has responsibility for managing the Basin's air resources and is responsible for bringing the Basin into attainment for federal and State air quality standards. To achieve this goal, each agency must prepare plans for the attainment of air quality standards, as well as plans for maintenance of those standards, once achieved.

The Project is expected to result in nitrogen oxide (NO_X) emissions, which would contribute to the formation of O_3, secondary PM_{10}, and secondary $PM_{2.5}$ from photochemical reactions during Project construction. Construction of the Project is expected to result in temporary increases in daily emissions of CO, NO_X, $PM_{2.5}$, and PM_{10}. However, all temporary increases are projected to be well below the SCAQMD significance thresholds. Additionally, the Project is a non-capacity-increasing project. Once reopened after construction, the proposed bridge will maintain the same number of lanes as the existing bridge. Therefore, the Project will not increase the volume of vehicles and will not increase operational emissions from vehicle traffic. Operation of the Project will also promote the flow of traffic. The Project would not be expected to conflict with the applicable air quality plan, the 2022 AQMP, or with regional goals for attaining and maintaining the CAAQS and NAAQS. Therefore, there would be no impact.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less-than-Significant Impact.

The Basin region of Riverside County is classified as a nonattainment area for the federal 8-hour O_3 standard, a serious nonattainment area for the federal $PM_{2.5}$ standard, and a maintenance area for the federal CO and PM_{10} standards. The Basin is also classified as a nonattainment area for the State 8-hour O_3, PM_{10}, and $PM_{2.5}$ standards. Therefore, the primary pollutants of concern for the Project are PM_{10}, $PM_{2.5}$, and CO, as well as volatile organic compounds (VOCs) and NO_X (precursors to O_3).

Construction

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (i.e., airborne dust) generated by excavation, grading, hauling, and other

construction-related activities. Emissions from construction equipment also are expected and would include CO, NO_X, VOCs, directly emitted particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminants such as diesel exhaust particulate matter. O_3 is a regional pollutant derived from NO_X and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involve clearing; cut-and-fill activities; grading, removing, or improving existing roadways and bridges; and paving roadway surfaces. Construction-related effects on air quality from most highway projects would generally be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM_{10}, $PM_{2.5}$, and small amounts of CO, sulfur dioxide (SO_2), NO_X, and VOCs to be of concern, also known as *fugitive dust.*[1] Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM_{10} emissions would be expected to vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment in operation. Larger dust particles would generally settle near the source, whereas fine particles would be dispersed over greater distances from the construction site.

Table 2.3-1 shows the estimates of regional pollutants that would be generated during the construction period from both onsite sources (e.g., construction equipment) and offsite sources (e.g., worker vehicles). As shown therein, emissions would be greatest during the grading/excavation period, with anticipated maximum daily emissions of approximately 7 pounds of reactive organic gases (ROG), 63 pounds of NO_X, 72 pounds of CO, 6 pounds of PM_{10}, and 3 pounds of $PM_{2.5}$. Emissions were estimated using the California Emissions Estimator Model (CalEEMod) Linear Construction Module (version 2022.1.1.29) that the California Air Pollution Control Officers Association (CAPCOA) developed to quantify O_3 precursors, criteria pollutants, and greenhouse gas (GHG) emissions from the construction and operation of new land use development and linear projects in California (CAPCOA 2022).

Table 2.3-1 Project Construction Emissions (pounds per day)

Construction Year	Estimated Daily Pollutant Emissions (pounds per day)					
	ROG[a]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2025	7	63	72	<1	6	3
2026	5	40	47	<1	4	2
Maximum Daily Emissions	**7**	**63**	**72**	**<1**	**6**	**3**
SCAQMD Regional Construction Threshold	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[1] *Fugitive dust* is particulate matter suspended in the air primarily from soil that has been disturbed by wind or other activities.

Source: Emissions estimates conducted using the CalEEMod Linear Construction Module (version 2022.1.1.29).
Model assumes no overlap between Project phases. See Appendix B.
Values are rounded to the nearest whole number.
[a] The terms VOCs and ROG are used interchangeably. ROG is used in this table based on CalEEMod.
SO_X = sulfur oxides

The U.S. Environmental Protection Agency (EPA) estimates that construction activities for large development projects add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, then emissions can be reduced by up to 50 percent. SCAQMD Rule 403, which requires projects to use water or dust palliative compounds, would reduce potential fugitive dust emissions during construction. The Project would implement all applicable fugitive dust control measures required by SCAQMD Rule 403 during Project construction, as defined in **SM AQ-1**.

In addition to dust-related PM_{10} emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_X, VOCs, and some soot particulate (i.e., PM_{10} and $PM_{2.5}$) in exhaust emissions. However, there are no sensitive receptors within 500 meters of the Project site. The closest sensitive receptor is 650 meters away. The land use around the Project site is primarily agricultural and rural. Total onsite emissions from construction equipment were estimated using the CalEEMod Linear Construction Module to determine the extent to which local receptors would be affected (Table 2.3-2). As shown in Table 2.3-2, total localized emissions, which include onsite emissions from construction equipment, are estimated to be well below the SCAQMD Localized Significance Threshold (LST) for construction for the source receptor area in which the Project is located.

Table 2.3-2 Construction-Period Localized Emissions (pounds per day)

Construction Year	CO	NO_X	PM_{10}	$PM_{2.5}$
2025	67	62	5	3
2026	44	39	4	2
Maximum Daily On-Site Emissions	**67**	**62**	**5**	**3**
SCAQMD Localized Significance Threshold for Construction[a]	23,866	896	178	86
Exceeds Threshold?	**No**	**No**	**No**	**No**

Source: Emissions estimates conducted using the CalEEmod Lineal Construction Module. See Appendix B.
[a] A 1-acre site and 500-meter receptor distances in Source Receptor Area 28 Hemet/San Jacinto were used; no LSTs have been established for VOC and SO_X. Values have been rounded to the nearest whole number.

SO_2 is generated by oxidation during the combustion of organic sulfur compounds contained in diesel fuel. Under State law and CARB regulations, offroad diesel fuel used in California must meet the same sulfur and other standards as onroad diesel fuel (i.e., not more than 15 parts per million of sulfur), so SO_2-related issues due to diesel exhaust would be minimal.

Most of the construction impacts on air quality would be short-term in duration and, therefore, would not result in long-term adverse conditions. Construction emissions are estimated to be well below both the SCAQMD Regional Threshold and LST for the Project area. Implementation of **SM AQ-1** would avoid or further reduce any potential air quality impacts resulting from construction activities. Impacts would be less than significant.

Operation

The Project does not propose any other land uses that would have long-term operational air emissions besides mobile sources.[2] For roadway improvement projects, regional emissions are a function of regional VMT and travel speeds. As such, the operational emissions analysis takes into account long-term changes in VMT and travel speeds expected to occur with the Project and compared to existing conditions and conditions without the Project. The Project is a non-capacity-increasing Project. Once reopened after construction, the proposed bridge will maintain the same number of lanes as the existing bridge. The Project will not increase the volume of vehicles and will not increase operational emissions from vehicle traffic. Operation of the Project would also promote the flow of traffic. Therefore, Project operations would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard, including PM_{10}, $PM_{2.5}$, and CO, as well as VOC and NO_X (precursors to O_3). There would be no impact from operational emissions.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less-than-Significant Impact.

Sensitive land uses include residences, hospitals, schools, daycare centers, and other locations the air district or CARB may determine to house individuals who are more susceptible to adverse health effects from air pollution (California Health and Safety Code § 42705.5(a)(5)). There are no sensitive receptors within 500 meters of the Project area.

Construction

As discussed above, the Project would generate pollutant emissions during the construction period that would be temporary and limited to the immediate area surrounding the construction activities. Based on the short-term duration of construction activities, impacts related to exposing sensitive receptors to substantial pollutant concentrations would be less than significant.

All criteria pollutants are associated with some form of health risk, such as asthma and other respiratory conditions. However, negative health effects associated with criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, the number and character of exposed individuals [e.g., age, health, gender]). In particular, O_3 can be formed through complex chemical reactions over long distances. Directly emitted particulate matter also does not always equate to a specific localized impact because emissions can be transported and dispersed. Given the factors that influence the formation and transport of pollution, quantifying specific health consequences from the Project's construction emissions is not feasible because the models designed to evaluate future O_3 and particulate matter levels and resulting health effects are based on regional or national conditions. In other words, the minor increases in air pollution from the

[2] The project's electrical demand should not differ from existing demands and would not result in direct onsite operational air emissions.

Project's construction activities would not result in material changes to ambient air quality or human health.

As shown in Table 2.3-1, the Project's estimated regional construction emissions would not be anticipated to exceed any of SCAQMD's regional significance thresholds for criteria pollutants. Furthermore, it should be noted that NAAQS and CAAQS are health-protective standards and define the maximum amount of ambient pollution that can be present without harming public health. SCAQMD's LSTs represent the level of pollutant emissions from onsite sources from a project that would not exceed the most stringent applicable federal or State ambient air quality standards. As such, projects with emissions below the applicable LSTs would not be in violation of the NAAQS or CAAQS, and, therefore, EPA's and CARB's health-protective standards. As shown in Table 2.3-2, the maximum daily onsite emissions are not projected to exceed the applicable LSTs. Therefore, there would be no violations of the health-protective CAAQS or NAAQS, and impacts would be less than significant.

Operation

The Project would not increase vehicle capacity or impact operations after Project construction is completed. Therefore, Project operations would not be expected to expose sensitive receptors to substantial pollutant concentrations. There would be no impact from Project operation.

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

Less-than-Significant Impact.

Construction

Some phases of construction, particularly asphalt concrete paving, would result in emissions that may cause short-term odors in the immediate area of each paving site. Such odors would be quickly dispersed at the site and as distance from the site increases. Impacts from objectionable odors would be less than significant.

Operation

Project operation is not anticipated to create objectionable odors.

2.3.3 Avoidance, Minimization, and Mitigation Measures

The following standard measure would be implemented to avoid or minimize potential impacts.

SM AQ-1

During clearing, grading, earthmoving, or excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur as required by SCAQMD and the

County, with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in Project specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.

2.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect either directly or through habitat modifications, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. 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 U.S. 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?	☐	☒	☐	☐

2.4.1 Regulatory Setting

Wetlands and Other Waters

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [U.S.C.] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of 1) hydrophytic (i.e., water-loving) vegetation; 2) wetland hydrology; and 3) hydric soils (i.e., soils formed during saturation or inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a *jurisdictional wetland* under the CWA.

CWA Section 404 establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic

environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE), with oversight by EPA.

USACE issues two types of Section 404 permits: General and Standard. There are two types of General permits: Regional permits and Nationwide permits. *Regional permits* are issued for a general category of activities when they are similar in nature and cause minimal environmental impacts. *Nationwide permits* are issued to allow a variety of minor project activities with no more than minimal effects. Ordinarily, projects that do not meet the criteria for a Nationwide permit may be permitted under one of USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For *Standard permits*, USACE's decision to approve is based on compliance with EPA's Section 404(b)(1) Guidelines (40 CFR), and whether permit approval is in the public interest. EPA developed Section 404 (b)(1) Guidelines in conjunction with USACE; these guidelines allow the discharge of dredged or fill material into the aquatic system (i.e., waters of the United States) only if there is no practicable alternative that would have fewer adverse effects. Section 404 (b)(1) Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative to the proposed discharge that would have lesser effects on waters of the United States and not have any other significant adverse environmental consequences.

The Executive Order (EO) for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this EO states that a federal agency, such as FHWA or Caltrans, as assigned, cannot undertake or provide assistance for new construction in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction; and (2) the project includes all practicable measures to minimize harm.

At the State level, the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs), and the CDFW primarily regulate wetlands and waters. In certain areas, the California Coastal Commission (or Bay Conservation and Development Commission or Tahoe Regional Planning Agency) regulates aquatic resources. Sections 1600–1607 of the California Fish and Game Code require any agency that proposes a project that would substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement would be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from CDFW.

The RWQCBs were established under the Porter–Cologne Water Quality Control Act (Porter–Cologne) to oversee water quality. Discharges under Porter–Cologne are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with CWA Section 401, the RWQCBs also issue water quality certifications for activities that may result in a discharge to waters of the United States. This is required most frequently in tandem with a Section 404 permit request.

Special-Status Species

CEQA Appendix G requires the consideration of a project's impacts on candidate, sensitive, or special-status species. Numerous federal and State laws and regulations apply to the protection of special-status plant and wildlife species. For the purposes of this analysis, species are considered to have special status if they meet at least one of the following criteria:

- Species listed or proposed for listing as threatened or endangered under Federal Endangered Species Act (FESA; 50 CFR 17.12 [listed plants]; 50 CFR 17.11 [listed animals]) or in various notices of the *Federal Register* (proposed species), as well as those species that are candidates for possible future listing as threatened or endangered under FESA (79 *Federal Register* 72450, December 5, 2014)

- Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA; 14 CCR 670.5)

- Plant species listed as rare under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.)

- Species that meet the definitions of rare or endangered under CEQA (§§ 15380 and 15125)

- Wildlife CDFW has designated as California Species of Special Concern (CSC)

- Wildlife species that are fully protected in California (California Fish and Game Code §§ 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish])

- Plant species listed as having a California Rare Plant Rank (CRPR) of 1A (presumed extinct in California), 1B (rare, threatened, and endangered in California and elsewhere), 2 (rare, threatened, or endangered in California, but more common elsewhere), 3 (plants for which more information is needed [a review list]), or 4 (plants of limited distribution [watch list]) (California Native Plant Society [CNPS] 2024). CRPR List 1A, 1B, 2, and 3 species meet the definition of rare or endangered in CEQA Section 15380. Many CRPR 4 species do not meet the same definitions of special-status plants, but are strongly recommended for consideration under CEQA (California Native Plant Society 2024). This may be particularly appropriate for populations at the periphery of a species' range, areas where the taxon is especially uncommon, areas where the taxon has suffered heavy losses, and populations exhibiting unusual morphology.

- Eagles protected under the Bald and Golden Eagle Protection Act

The results of the literature review were compiled into a list of potentially occurring special-status plant and wildlife species, and each species was analyzed for its potential to occur within the Biological Study Area (BSA) for the Project (i.e., the Project LOD plus a 300-foot buffer). The results of the determinations are provided in Appendix D.

While not considered special status, nesting birds are protected under federal and State nesting bird regulations, including:

- Migratory Bird Treaty Act (MBTA)
- EO 13186— Responsibilities of Federal Agencies to Protect Migratory Birds
- California Fish and Game Code Sections 3503 et seq.

The Project includes measures to ensure compliance with federal and State nesting bird protections. These measures are also discussed in relevant sections pertaining to special-status avian species.

Local

Western Riverside Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), a comprehensive regional habitat conservation plan, was adopted in June 2003 (Riverside County Integrated Project 2003). Major participants in the regional planning effort included, but were not limited to, Caltrans, CDFW, USFWS, the County of Riverside, Riverside County Transportation Commission, 14 cities, and interested individuals and groups. The purpose of the MSHCP is to develop methods and procedures that provide for development, while protecting environmental resources in the western Riverside County area over a 75-year period.

The MSHCP, among other things, provides impact mitigation for current and future County projects on existing and planned routes in the covered area of western Riverside County. County participation is intended to streamline the environmental process for covered transportation projects in western Riverside County and save money over the long term.

A consistency review by the wildlife agencies (i.e., USFWS and CDFW) was performed to ensure that the Project is consistent with the requirements of the MSHCP. A MSHCP Consistency Analysis was prepared in tandem with the Determination of Biologically Equivalent or Superior Preservation (DBESP) Report as a part of the Joint Project Review for the Western Riverside County Regional Conservation Authority (RCA) and wildlife agency review and concurrence, which was obtained on February 4, 2026. Because there is a federal nexus for the Project, the consistency review would result in a streamlined Biological Opinion from USFWS. Take would be provided through the MSHCP.

Portions of the Project occur in the following MSHCP survey areas:

- Burrowing Owl (BUOW) Survey Area
- Mammal Species Survey Area: Los Angeles Pocket Mouse and San Bernardino Kangaroo Rat

The Project is not located within any MSHCP plant survey areas, including those for MSCHP Narrow Endemic Plant Species or MSHCP Criteria Survey Areas (RCA 2024).

Although the MSHCP does not provide survey areas for least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), if potential habitat was present and potential direct or indirect effects could occur, then focused surveys would be necessary. The MSHCP also requires a full review of potential riparian/riverine and vernal pool resources.

2.4.2 Discussion of Environmental Evaluation Question 2.4 – Biological Resources

Information used in this section is from the *Natural Environment Study (Minimal Impacts)* (NESMI) (September 2024) (Caltrans 2024a), *Jurisdictional Delineation* (March 2021) (Caltrans 2024b), *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis Report* (June 2025) (Caltrans 2025a), and *Determination of Biologically Equivalent or Superior Preservation Report* (June 2025) (Caltrans 2025b).

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation.

Special-Status Plant Species

A literature review of the California Natural Diversity Database (CNDDB); CNPS Inventory of Rare, Threatened, and Endangered Plants of California; and USFWS Information for Planning and Consultation Proposed, Threatened, and Endangered Species, and Critical Habitats Resource List determined that 62 special-status plant species may occur within the BSA (CNPS 2024; CDFW 2024a; USFWS 2024). Nine of these species are federally and/or State-listed as endangered or threatened. A focused survey for special-status plants was conducted in May 2022 within the Project LOD and a 100-foot buffer. No special-status plant species were detected.

All 62 of the special-status plants identified in the literature review—including nine federally and/or State-listed endangered or threatened plants—were determined to be absent because they were not observed during field surveys, suitable habitat was lacking, or the species' geographic or elevational range was not within the BSA. No impacts are anticipated because federally and/or State-listed plant species are considered absent from the BSA; therefore, no avoidance and minimization efforts or compensatory mitigation are required.

Special-Status Wildlife Species

A literature review of the CNDDB and USFWS Information for Planning and Consultation Proposed, Threatened, and Endangered Species, and Critical Habitats Resource List determined that 44 special-status wildlife species are known from the region and could potentially occur

within the BSA, if the proper habitat overlaps with the geographic and elevational range of the species (Appendix D). Of these 44 species, 18 are federally and/or State-listed as endangered or threatened or candidate species (Appendix D). Appendix D also includes eight CDFW Watch List species and one MSHCP-covered species with no special status (northwestern San Diego pocket mouse).

Surveys for special-status wildlife species were done in compliance with the requirements in the MSHCP. The BSA included a 300-foot buffer applied from the Project LOD for general biological resources, such as vegetation mapping and wildlife corridors, and a 500-foot buffer applied from the Project LOD for burrowing owl (*Athene cunicularia*), riparian bird habitat assessment, and small mammal habitat assessment and trapping.

Species that are listed, proposed, or candidates for listing under FESA and CESA are discussed below in their own section. All other non-listed special-status wildlife species are discussed in the following subsection.

Federally and State-Listed Wildlife Species

Of the 18 federally and/or State-listed, proposed, or candidate animal species initially reviewed, three species—Crotch's bumblebee (*Bombus crotchi*), coastal California gnatcatcher (*Polioptila californica californica*), and BUOW—were determined to potentially occur within the BSA based on species requirements, habitat suitability, and BSA conditions.

San Bernardino kangaroo rat (*Dipodomys merriami parvus*) was determined to be absent from the BSA based on small mammal trapping surveys performed for the Project; however, USFWS-designated critical habitat for this species is present within the BSA. Therefore, this species is discussed below.

Although least Bell's vireo (*Vireo bellii pusillus*) was incidentally detected during burrowing owl surveys, the individual bird was located outside of the 500-foot BSA and there is no nesting or foraging habitat for this species within the BSA. However, it is possible for the riparian habitat along Potrero Creek to be used as stopover and short-term foraging habitat by this species. Therefore, this species is discussed below.

The remaining 13 listed or candidate species were determined to be absent (Appendix D) because they were not observed during focused surveys, suitable habitat was lacking, or the species' geographic range was not within the BSA: vernal pool fairy shrimp (*Branchinecta lynchi*), monarch butterfly (*Danaus plexippus*), Quino checkerspot butterfly (*Euphydryas editha quino*), Riverside fairy shrimp (*Streptocephalus woottoni*), arroyo toad (*Anaxyrus californicus*), southern mountain yellow-legged frog (*Rana muscosa*), western spadefoot (*Spea hammondii*), southwestern pond turtle (*Actinemys pallida*), southern rubber boa (*Charina umbratica*), tricolored blackbird (*Agelaius tricolor*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), and Stephens' kangaroo rat (*Dipodomys stephensi*). These species are not discussed further.

Crotch's Bumblebee

Crotch's bumblebee was State-listed as a candidate species under the CESA by CDFW in June 2019 (CDFW 2019). As a candidate species, Crotch's bumblebee receives the same legal protection afforded to an endangered or threatened species under the CESA (California Fish and Game Code, Section 2085).

Crotch's bumblebee range spans from coastal California east toward the Sierra-Cascade Crest, including the Mediterranean region, Pacific coast, western desert, Great Valley, and adjacent foothills through most of southwestern California. It is also found in southwest Nevada near the California border, but it is less common in this region (Koch et al. 2012, Xerces Society 2018). The species' relative abundance has declined by 98 percent, and it is currently found in only 20 percent of its historic range. Most extant records of occurrence are from southern coastal habitats and areas near Sacramento (Xerces Society 2018).

Crotch's bumblebee commonly occurs in open grasslands and scrubland habitats with flowering plants for foraging. The species nests underground, often in abandoned rodent burrows. In the spring, bumblebees form colonies founded by a solitary queen, where eggs are laid and incubated, and the brood is hatched. After mating, the males die and the queens feed briefly before digging their individual hibernacula and becoming dormant for the winter (Koch et al. 2012). In the winter, Crotch's bumblebee likely inhabits soft, disturbed soil or winters under leaf litter or other loose debris (Xerces Society 2018). Bumblebees are generalist foragers, feeding on a variety of flowering plants with pollen and nectar sources (Koch et al. 2012). Crotch's bumblebee most often forages on open flowers with short corollas, particularly species in the generas *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*. Bumblebees are most often found where flowers are blooming; the species is not often detected in underground nests.

Up to 13.37 acres of suitable habitat for Crotch's bumblebee occurs within the BSA as Riversidian upland sage scrub. In addition, loose and friable soils that could support burrowing for underground nests are present. A number of the flowering plants that this species frequents were detected within the BSA (Caterpillar phacelia [*Phacelia cicutaria*], wild canterbury bells [*Phacelia minor*], California buckwheat, and Wright's buckwheat [*Eriogonum wrightii*]). Focused surveys for Crotch's bumblebee were not performed for the Project. This species has been reported at multiple locations in the Badlands north of the BSA, with the closest records of occurrence reported in 2020 approximately 5 miles northwest of the BSA (CDFW 2024a), as well as in the San Jacinto Valley in 2024 approximately 3 miles southwest of the BSA (iNaturalist 2024).

The Project would result in the temporary disturbance of 0.57 acre and the permanent removal of 0.16 acre of suitable scrubland habitat (i.e., Riversidian upland sage scrub) that could support Crotch's bumblebee due to the replacement of the existing Gilman Springs Road Bridge, as well as temporary work areas and access.

Project construction and vegetation clearing could result in direct mortality or injury of individual Crotch's bumblebee, should they be present, as a result of construction equipment. Nesting colonies or overwintering queens could be crushed or entombed in their underground

burrows or disturbed by construction-related activities such as noise and vibrations from heavy equipment. If construction occurs during the breeding season, it could disturb breeding behavior, resulting in negative impacts on reproduction. Other potential direct impacts include the compaction of soil due to construction vehicles, which may decrease the availability of friable soils for burrow creation.

The Project could also have temporary indirect impacts on Crotch's bumblebee within the BSA outside of the Project footprint, should this species be present, as a result of Project construction activities. Indirect impacts are considered to be minor, but they may consist of dust, erosion, introduction of invasive species on disturbed soils, roadway runoff, and increased fire risk.

Although there is suitable habitat to support Crotch's bumblebee within the BSA, with the implementation of the measures described below, no take is anticipated and impacts would be considered less than significant.

Furthermore, avoidance and minimization measures (AMMs) **AMM BIO-28** and **AMM BIO-29** would help avoid any direct mortality of Crotch's bumblebee during construction, should they be present. Implementation of standard measures (SM) **SM BIO-2**; **AMM BIO-3**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **MM BIO-8**, **AMM BIO-9**, and **AMM BIO-13** (below) would minimize potential impacts on Crotch's bumblebee and their suitable habitat that may occur within and adjacent to the Project LOD. If the species is detected within the Project area during pre-construction surveys, then CDFW will be consulted and a California Endangered Species Act Section 2081 Incidental Take Permit will be obtained. Furthermore, it is likely that the CDFW Section 1602 Streambed Alteration Agreement will be conditioned to complete protocol surveys in advance of construction. No further avoidance and minimization measures or compensatory mitigation would be necessary for this species. Impacts would be considered less than significant with mitigation.

Coastal California Gnatcatcher

Coastal California gnatcatcher is listed as a threatened species by USFWS and as a State Species of Special Concern by CDFW. It is also a fully Covered Species under the MSHCP.

Coastal California gnatcatcher surveys were not specifically conducted for the Project because this species is a Fully Covered Species under the MSHCP. However, suitable habitat was assessed during the reconnaissance fieldwork because FESA take consideration of this species under the MSHCP is tracked through the removal of potential habitat. In addition, it is important to identify potential habitat because there are habitat removal constraints if suitable habitat occurs within a Criteria Cell or on Public/Quasi-Public (PQP) lands.

Up to 13.37 acres of nesting and foraging habitat for coastal California gnatcatcher occurs within the BSA as Riversidian upland sage scrub. This habitat is present along the hillsides and slopes of the northern portion of the BSA, as well as on the alluvial fans in the southern portion of the BSA.

Coastal California gnatcatchers were not incidentally observed during any of the field studies performed for the Project. However, occurrence records frequently report this species within the BSA and surrounding Project area, particularly around Massacre Canyon (eBird 2024). Reports

include breeding pairs from as recent as February 2023. Because this species is a year-round resident, barring any substantive changes in habitat quality, local biodiversity, or environmental factors (e.g., an influx of predatory species, unfavorable weather conditions), habitat that has previously been occupied should reasonably be assumed to remain occupied.

No USFWS-designated critical habitat for coastal California gnatcatcher occurs within the BSA. During construction of the Project, suitable habitat for coastal California gnatcatcher would be temporarily disturbed (0.57 acre) and permanently removed (0.16 acre). However, most of the habitat located within the Project LOD is marginally suitable for this species due to roadside disturbances; the majority of quality habitat and occupied habitat for coastal California gnatcatcher is located outside of the Project LOD. Therefore, impacts on lands that provide long-term conservation value for coastal California gnatcatcher are expected to be minimal.

With the implementation of the avoidance and minimization measures described, direct impacts on coastal California gnatcatcher individuals (e.g., injury, mortality) are not anticipated. Indirect impacts would likely be from degradation of habitat and disturbance from construction noise, traffic noise, or other activities that may result in disruptions to daily activities (e.g., foraging, calling) for any coastal California gnatcatcher living within the area. These disturbances could cause individuals to temporarily relocate or, at the extreme, to find new territories that are farther from the disturbances. In addition, construction may result in indirect impacts on coastal California gnatcatcher habitat from habitat degradation from fugitive dust or the spread of weed seeds. However, these impacts would be greatly reduced with the implementation of avoidance and minimization measures identified below, which are intended to avoid and/or minimize such potential direct and indirect impacts.

As a Fully Covered Species under the MSHCP, potential direct and indirect impacts on coastal California gnatcatcher would be fully addressed through consistency with the MSHCP. To ensure full avoidance of coastal California gnatcatcher within Criteria Cells and to comply with the MSHCP, construction work will be restricted during the species' breeding season of February 15–August 30, unless the preconstruction protocol surveys for coastal California gnatcatcher are negative and it is confirmed by the wildlife agencies that vegetation clearing may be performed during the species' breeding season (Measures **AMM BIO-1** and **AMM BIO-30**). The avoidance/minimization measures presented for other species (Measures **SM BIO-2**, **AMM BIO-3**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **MM BIO-8**, **AMM BIO-9**, **AMM BIO-13**, and **AMM BIO-22**) would also protect coastal California gnatcatcher and its suitable habitat in the vicinity of the Project and ensure compliance with the MSHCP. Although coastal California gnatcatcher is a Covered Species under the MSHCP, Measures **AMM BIO-14** and **AMM BIO-30** would ensure that direct impacts on nesting coastal California gnatcatcher are avoided because it is protected by the MBTA and similar provisions under the California Fish and Game Code. No further avoidance and minimization measures or compensatory mitigation would be necessary. Impacts would be considered less than significant with mitigation.

Least Bell's Vireo

Least Bell's vireo is listed as an endangered species by USFWS and CDFW. It is also a Covered Species under the MSHCP; however, focused studies for least Bell's vireo are required when the

species potentially occupies riparian/riverine vegetation and could be directly and/or indirectly affected (MSHCP Volume I, Section 6.1.2).

Least Bell's vireo is found as a summer resident of Southern California, where it inhabits low riparian growth in the vicinity of water or dry river bottoms below 2,000 feet. Nests are found in dense vegetation located low in the riparian zones, most frequently in 5- to 10-year-old stands. When least Bell's vireo nest in mature riparian woodlands, they nest in areas with a substantial robust understory of willows as well as other plant species (Franzreb 1989, Goldwasser 1981).

A single least Bell's vireo was incidentally detected within a basin that contains riparian habitat approximately 820 feet from the Project LOD and 320 feet outside of the 500-foot BSA buffer in August 2022 during the burrowing owl surveys performed for the Project. Least Bell's vireo is known to nest within the Project region (CDFW 2024a); therefore, it is possible for the riparian habitat along Potrero Creek to provide stop-over habitat for transient individuals or short-term foraging habitat for birds nesting in the regional vicinity. However, it does not provide any suitable nesting, live-in, or long-term foraging habitat for least Bell's vireo, which typically prefers large stands of dense riparian habitat with a dominance of mature willow trees. A full evaluation of least Bell's vireo and representative photos of site conditions can be found in the DBESP (Caltrans 2025b).

Because no suitable nesting or live-in habitat for least Bell's vireo is located within the BSA, no direct impacts on nesting or breeding individuals, including loss of nesting habitat, injury or mortality of individual birds, or nest destruction or abandonment, would occur. Any individuals that could occasionally use the riparian habitat for stop-over or short-term foraging would avoid the work area during construction. Therefore, no direct impacts on individual least Bell's vireo are expected. However, although least Bell's vireo is not expected to occur, because this species is known to occur in the Project region and site conditions such as an increase in riparian habitat could occur over time, there is a possibility of it moving into the site prior to the start of Project construction. Therefore, preventative avoidance and minimization measures will be implemented to avoid any possible impacts on this species, including avoiding vegetation clearing during the species' breeding season (Measure **AMM BIO-1**) and conducting preconstruction surveys if construction activities are to be performed during the breeding season for least Bell's vireo (Measure **AMM BIO-26**). These preventative measures would avoid any potential impacts on least Bell's vireo, should they be present. A detailed review of Project-related impacts on least Bell's vireo is provided under separate cover in the DBESP that was prepared for the Project (Caltrans 2025b). No further avoidance and minimization measures or compensatory mitigation would be necessary. Impacts would be considered less than significant with mitigation.

San Bernardino Kangaroo Rat

San Bernardino kangaroo rat was listed as an endangered species by the USFWS in 1998 (USFWS 1998) and by CDFW in 2023 (CDFW 2024c). It is also an MSHCP Covered Species with additional survey requirements.

San Bernardino kangaroo rat is one of three subspecies of the Merriam kangaroo rat (*Dipodomys merriami*). The Merriam kangaroo rat is a widespread species that can be found from the inland valleys to the deserts. The subspecies known as the San Bernardino kangaroo rat, however, is

confined to inland valley scrub communities and, more particularly, to scrub communities occurring along rivers, streams, and drainages. It prefers sandy and gravelly soils of alluvial fans, river channels, and terraces. San Bernardino kangaroo rat occurs primarily in the Santa Ana River and its tributaries north of Interstate 10 within San Bernardino County; an isolated population also occurs along the San Jacinto River in Riverside County (USFWS 2002).

Critical habitat for San Bernardino kangaroo rat was originally designated in 2002 (USFWS 2002). The 2002 final rule was proposed for revision in June 2007, reducing the acreage of critical habitat from 33,290 to 7,779 acres, and a final designation was issued in 2008 (USFWS 2008). In a federal district court ruling on January 8, 2011—*Center for Biological Diversity* v. *USFWS*—the 2008 final critical habitat designation was found to be invalid and the 2002 final critical habitat designation and acreage were reinstated. As part of the *Final Designation of Critical Habitat for the San Bernardino Kangaroo Rat*, the USFWS has identified the following four Primary Constituent Elements as being essential for the conservation of San Bernardino kangaroo rat (USFWS 2002):

1. Soil series consisting predominantly of sand, loamy sand, sandy loam, or loam;
2. Alluvial sage scrub and associated vegetation, such as coastal sage scrub and chamise chaparral, with a moderately open canopy;
3. River, creek, stream, and wash channels; alluvial fans; floodplains; floodplain benches and terraces; and historic braided channels that are subject to dynamic geomorphological and hydrological processes typical of fluvial systems within the historical range of the San Bernardino kangaroo rat. These areas may include a mosaic of suitable and unsuitable soils and vegetation that either (a) occur at a scale smaller than the home range of the animal, or (b) form a series of core areas and linkages between them; and
4. Upland areas proximal to floodplains with suitable habitat (e.g., floodplains that support the soils, vegetation, or geomorphological, hydrological and aeolian processes essential to this species). These areas are essential due to their geographic proximity to suitable habitat and the functions they serve during flooding events. These areas may include marginal habitats such as agricultural lands that are disced annually, out-of-production vineyards, margins of orchards, areas of active or inactive industrial or resource extraction activities, and urban/wildland interfaces.

Suitable habitat for San Bernardino kangaroo rat is present in the Riversidian upland sage scrub and unvegetated stream channel vegetation communities/land cover types within the BSA. No San Bernardino kangaroo rats were captured during small mammal live trapping surveys in November 2023, and this species is considered absent from the BSA. Detailed results from the trapping surveys and representative photographs of the traplines are provided in the *45-Day Small Mammal Trapping Survey Report* in Appendix F of the NESMI (Caltrans 2024a)

The BSA is located within the 2002 final critical habitat Unit 3: San Jacinto River-Bautista Creek for San Bernardino kangaroo rat, which encompasses approximately 5,565 acres along the San Jacinto River on lands in the vicinity of San Jacinto, Hemet, and Valle Vista in Riverside County (USFWS 2002). The BSA contains 8.77 acres of USFWS-designated critical habitat for San Bernardino kangaroo rat.

The Project will result in 0.78 acre of temporary and 0.16 acre of permanent impacts on unoccupied San Bernardino kangaroo rat critical habitat due to the bridge replacement and

roadway realignment, as well as temporary work areas and access. Because San Bernardino kangaroo rat is considered absent from the BSA, no direct impacts on any individuals are anticipated. Any indirect impacts (e.g., noise, human presence) resulting from Project activities are not expected to affect San Bernardino kangaroo rat beyond existing baseline conditions, should any individuals be present at the time of construction.

Furthermore, San Bernardino kangaroo rat is a Covered Species under the MSHCP; therefore, impacts on critical habitat for this species have been anticipated and addressed in the Biological Opinion for the MSHCP, and no additional impacts are expected. Implementation of Measures **SM BIO-2**, **AMM BIO-3**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **MM BIO-8**, **AMM BIO-9** and **AMM BIO-13** (below) would avoid indirect impacts on adjacent critical habitat and provide consistency with the MSHCP. No further avoidance and minimization measures or compensatory mitigation would be necessary. Impacts would be considered less than significant with mitigation.

Burrowing Owl

Burrowing owl is a State Candidate Species under CESA by the California Fish and Game Commission (since October 10, 2024) and protected during the nesting season by the MBTA and California Fish and Game Code Sections 3503 and 3800. In addition, California Fish and Game Code Sections 2503, 3503.5, and 2800 prohibit the take, possession, or destruction of birds, their nests, or eggs. Burrowing owl is also an MSHCP Covered Species with additional survey requirements.

Burrowing owl is found in a wide variety of dry, open habitats, including grasslands, agricultural lands, prairies, and desert habitats. In southern California, a substantial number of birds are found in microhabitats that have been highly altered by humans, including flood control and irrigation basins, dikes, and banks; abandoned fields surrounded by agriculture; and road cuts and margins. The species often co-occurs with burrowing animals, such as California ground squirrel (*Otospermophilus beecheyi*), although it is also known to use debris piles, rock outcrops, and other artificial burrows, such as pipes and crevices. It commonly perches on fence posts and on top of excavated earth outside of its burrow (Zeiner et al. 1988–1990).

As required by the MSHCP, potentially suitable burrows were mapped as a part of the initial habitat assessment in areas intersecting the MSHCP Burrowing Owl Survey Area. Following the habitat assessment and burrow survey, four subsequent protocol burrowing owl surveys were conducted in August 2022 in areas of the BSA that contained suitable burrows and had the potential to support burrowing owl.

Suitable habitat to support burrowing owl is present throughout the BSA, with the exception of the developed Gilman Springs Road roadway and bridge and the patches of nonnative trees along the road edge. Vegetation within the BSA is of varying heights and densities, but generally consists of low-to-moderate height shrubs and herbaceous vegetation with open to moderate cover. Vegetation within the BSA is typically open enough to be suitable for burrowing owl, with vegetative cover denser in the outer limits of the BSA, particularly on the steep hillsides to the north. Areas adjacent to the drainage within the LOD typically consist of less than 20 percent cover, whereas portions of the BSA outside of the LOD contain greater than 50 percent cover by

shrubs that are 3 feet or taller. The northern side of the BSA is composed primarily of steep hillsides; therefore, these areas were considered to have a low potential to support burrowing owl. The southern portion of the BSA contains one burrow at least 4 inches in diameter and a debris pile that could function as suitable burrows for burrowing owl; a single burrow at least 4 inches in diameter was also detected along Potrero Creek north of the bridge. The burrows were located in areas where vegetation was open enough to be suitable for burrowing owl; none of the potentially suitable burrows showed signs of recent digging or other activity. The debris pile included dumped rock, concrete, and wood, and contained crevices and holes that were suitable for burrowing owl, although the adjacent habitat was relatively poor and contained dense shrubs. Nevertheless, the debris pile was elevated enough that it could be utilized by burrowing owl.

No burrowing owl or their sign (e.g., whitewash, feathers, pellets) was observed. The closest documented burrowing owl are located approximately 3–4 miles from the BSA. Two adults and a breeding pair were recorded approximately 3 miles to the southwest of the BSA in 2007, and an individual juvenile was reported at a winter burrow site approximately 4.2 miles northeast of the BSA in 2006 (CDFW 2024a). Because neither burrowing owl nor its sign was observed during protocol surveys, the species is considered absent from the BSA.

During construction of the Project, suitable habitat that could support burrowing owl would be temporarily disturbed and permanently removed (0.84 acre and 0.22 acre, respectively). However, most of the habitat that is located within the Project LOD is marginally suitable for this species due to roadside disturbances, and no suitable burrows were detected within the Project LOD. The majority of quality habitat for burrowing owl is located outside of the Project LOD. Therefore, impacts on lands that provide long-term conservation value for burrowing owl are expected to be minimal.

Based upon the negative survey results from August 2022, the Project is not expected to affect burrowing owl during construction or other Project-related activities because this species is absent from the BSA. Although the Project is currently unoccupied by burrowing owl, the species is highly mobile and could occupy areas within the BSA in the future. If burrowing owl are present at the time of construction work, then vegetation removal or grading could result in injury or mortality to any owls that are inside burrows and unable to leave (primarily young); it would also crush any active burrows on the site. Owls flying out of burrows to escape could collide with machinery or vehicles. If any burrowing owls are inhabiting the Project site at the time of construction work, then they would be displaced. However, a CESA Section 2081 Incidental Take Permit would be required if owls are present, which would avoid or minimize impacts on burrowing owl.

Potential indirect effects on burrowing owl could occur if individual owls were unexpectedly found prior to construction. These impacts could include effects from construction, such as nighttime lighting, dust, loss of foraging habitat due to fire, trampling or inadvertent loss of habitat due to inadequate demarcation of the Project LOD and/or poor training of construction personnel, degradation of habitat due to the introduction of invasive species and/or waste, and/or erosion and sedimentation leading to a loss of habitat.

Although no burrowing owls were observed within the BSA, they could subsequently inhabit the BSA in areas that were previously determined to be unoccupied. Measures **AMM BIO-12**,

AMM BIO-17, and **AMM BIO-18** would ensure that there would be no direct mortality of burrowing owls during construction, should this species be present. Implementation of Measures **SM BIO-2**, **AMM BIO-3**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **MM BIO-8**, **BIO-9**, **BIO-13**, and **AMM BIO-22** would minimize potential impacts on burrowing owl that may occur adjacent to the Project LOD. No further avoidance and minimization measures or compensatory mitigation would be necessary for this species. Impacts would be considered less than significant with mitigation.

Non-Listed Special-Status Wildlife Species

Two special-status species were detected within the BSA during the field survey efforts: Los Angeles pocket mouse (CSC), and Bryant's (San Diego desert) woodrat (CSC). Other species have potential to occur based on habitat present on site. Of the 26 non-listed special-status wildlife species identified in the region from a database search, 17 were determined to have potential to occur within the BSA (Appendix D): southern California legless lizard (*Anniella stebbinsi*), California glossy snake (*Arizona elegans occidentalis*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), San Diego banded gecko (*Coleonyx variegatus abbotti*), red-diamond rattlesnake (*Crotalus ruber*), coast horned lizard (*Phrynosoma blainvillii*), golden eagle (*Aquila chrysaetos*), coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), white-tailed kite (*Elanus leucurus*), loggerhead shrike *(Lanius ludovicianus*), purple martin (*Progne subis*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), southern grasshopper mouse (*Onychomys torridus ramona*), American badger (*Taxidea taxus*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (foraging only; *Corynorhinus townsendii*), and western yellow bat (*Lasiurus xanthinus*).

CDFW Watch List species are not considered special-status species under CEQA, but they are monitored by CDFW for potential to be listed in the future (though are not necessarily tracked in CNDDB). Southern California rufous-crowned sparrow is the one watch list species observed during site visits. Four other watch list species were determined to have high potential to occur: orange-throated whiptail (*Aspidoscelis hyperythra*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), California horned lark (*Eremophila alpestris actia*), and Bell's (sage) sparrow (*Artemisiospiza belli belli*). Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), a non-sensitive MSHCP-covered species, was also detected during small mammal surveys. Impacts on these species would not be considered significant; therefore, no further discussion of these species is included.

The following section includes discussion of Los Angeles pocket mouse, special-status bats, and other non-listed special-status animal species. Los Angeles pocket mouse is discussed separately because of its specific survey requirements under the MSHCP. Bats are discussed in their own section because of their distinct habitat requirements. All other special-status species are discussed under *Other Non-listed Special-Status Wildlife Species*.

Los Angeles Pocket Mouse

Los Angeles pocket mouse is a CSC. It is also an MSHCP Covered Species with additional survey requirements.

Los Angeles pocket mouse is a species of rodent in the family Heteromyidae. It is one of eight subspecies of the little pocket mouse (*Perognathus longimembris*) in California (Hall 1981). Like all *Perognathus*, the Los Angeles pocket mouse typically hibernates in the winter, depending on conditions, but can be active during periods of cold weather. It becomes torpid when deprived of food for 24 to 36 hours. Little pocket mice periodically emerge from hibernation to feed on seed caches stored in their burrows. Emergence from hibernation is correlated with availability of forb and grass seeds. Los Angeles pocket mice feed largely on seeds and seasonally eat forbs and, to a lesser degree, arthropods and larva. The habitat of Los Angeles pocket mice includes lower elevation grassland, alluvial sage scrub, and coastal sage scrub (Bolster 1998).

The historic range for Los Angeles pocket mouse once included the San Gabriel Valley in the west, through the Inland Valleys and into the Cabazon near the San Gorgonio Pass to the east, between the San Bernardino and San Jacinto Mountains in the north, and through the San Jacinto and Temecula Valleys to the south. The current range is similar but no longer extends westerly to the San Gabriel Valley (Bolster 1998; Hall 1981). This species is uncommon throughout its range. Existing populations are generally small and disconnected from others (Bolster 1998).

Friable soils within suitable open scrub habitat for Los Angeles pocket mouse are present throughout the BSA, including in the Riversidian upland sage scrub and unvegetated stream channel vegetation communities/land cover types, particularly in the lowland portions of the BSA. A total of 30.85 acres of habitat that is either occupied by Los Angeles pocket mouse or is considered to contribute long-term conservation value to the species is present within the BSA. In addition to the Riversidian upland sage scrub and unvegetated stream channel vegetation communities/land cover types, most of the ruderal areas within the BSA were also considered to be suitable, including areas such as ruderal land cover types that may not contain prime burrow habitat but could support Los Angeles pocket mouse living in the area (e.g., foraging, dispersing young). Paved and compacted dirt roads, and ruderal areas that experience regular disturbance (e.g., mowing/discing firebreaks and off-road vehicles), were not considered to be suitable. The main flow, active channel of Potrero Creek was also excluded, but the surrounding benches above the active channel that contain sparse vegetation and only experience flooding every few years were considered to be suitable for Los Angeles pocket mouse. These determinations were based on the habitat requirements for Los Angles pocket mouse (Dudek 2003) and the population size on site, as well as the professional opinion of the qualified small-mammal biologist who performed these surveys, has 2 decades of experience working with this species, and has observed this species in similar habitats and conditions at other locations.

A total of 19 Los Angeles pocket mice were captured during small mammal live trapping surveys in November 2023. Of the 19 captures, 15 were unique individuals and 4 were recaptures.

During Project construction, habitat that was determined to either be occupied by Los Angeles pocket mouse or that contributes long-term conservation value would be temporarily disturbed and permanently removed (0.60 acre and 0.14 acre, respectively). This would result in impacts on less than 10 percent of the habitat that provides long-term conservation value for Los Angeles pocket mouse. Impacts would occur on 2.4 percent (of which 0.5 percent is permanent and 1.9 percent is temporary) of the 30.85 acres of long-term conservation value habitat for the species

within the BSA; the remaining 97.6 percent would be avoided. All permanent impacts would occur within the County right-of-way for this covered road, and all temporary impacts would be restored. Therefore, the impacts on the long-term conservation of the species would be negligible.

Project construction and vegetation clearing could result in direct mortality, injury, or harassment of individual Los Angeles pocket mice as a result of construction vehicles and heavy equipment. Other direct impacts may include individuals being crushed or entombed in their burrows, collection by Project personnel, and injury or mortality from opportunistic predators during construction activity. Activities associated with construction, including disturbance by noise or vibrations from the heavy equipment, may result in disruption of Los Angeles pocket mouse behavior. If construction occurs during the breeding season, it could disturb breeding behavior, resulting in negative impacts on reproduction.

Other potential direct impacts include the compaction of soil due to construction vehicles, which may decrease the availability of friable soils for burrow creation. Capturing, handling, and relocating Los Angeles pocket mice that occur within the construction area could cause injury or death if proper handling and relocation techniques are not used.

Indirect effects of construction include an increase in human activity, which could result in an increase in opportunistic predators that are attracted to litter, such as coyote (*Canis latrans*) and American crow (*Corvus brachyrhynchos*). Construction and mechanical soil disturbance may adversely affect Los Angeles pocket mouse habitat on site by altering drainage patterns and encouraging the spread of invasive plant species, which could indirectly result in loss of quality habitat and an increase in fire frequency.

Measures **AMM BIO-12**, **AMM BIO-16**, **AMM BIO-17**, and **AMM BIO-27** would help avoid any direct mortality of Los Angeles pocket mice during construction. Implementation of Measures **SM BIO-2 AMM BIO-3**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **AMM BIO-9**, and **AMM BIO-13** would avoid potential impacts on Los Angeles pocket mice and their suitable habitat that may occur within and adjacent to the Project LOD. Measure **MM BIO-8** will ensure that all habitat that is occupied by Los Angeles pocket mouse or that contributes long-term conservation value to the species and experiences temporary impacts would be returned to original conditions or better at their current locations through onsite restoration at a 1:1 ratio following an HMMP and Restoration Plan. No further avoidance and minimization measures or compensatory mitigation would be necessary. Impacts would be considered less than significant with mitigation.

Special-Status Bats

Special-status bats with a potential to occur in the BSA include pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (foraging only; *Corynorhinus townsendii*), and western yellow bat (*Lasiurus xanthinus*).

A bat habitat assessment was conducted in August 2022 throughout the Project LOD, plus a 100-foot buffer, to identify potential bat roosts. Where potential roosts were found, the feature and surrounding area were searched for bat sign (e.g., urine staining, guano). Suitable bat roost

habitat is present at the Gilman Springs Road Bridge over Potrero Creek. The underside of the bridge is mostly smooth concrete with no apparent roosting crevices or cavities; however, some crevices at joints provide some narrow (less than 1 inch) spaces, and there are a few holes under the bridge. It was not clear during the habitat assessment if the holes provide access into the bridge, but they do appear to have space for bats to use for day roosting. Several swallow nests were also detected between the east- and westbound sides of the bridge that would provide bat roosting opportunities. No bats were directly observed or heard during the habitat assessment, but a few scattered pieces of guano were found near the middle of the bridge near the swallow nests. It was not clear if bats have used this site for night roosting, day roosting, or where exactly in the bridge they were roosting, although the swallow nests seem the most likely roost location. Holes and crevices in rocks on the cliff faces of Massacre Canyon in the northern portion of the BSA outside of the LOD could also provide roosting habitat for cavity- and crevice-roosting bats. Mature trees were also identified within the BSA as potential roosting habitat for tree-roosting bats.

A bat emergence survey was conducted at the Gilman Springs Road Bridge over Potrero Creek in October 2023. Biologists visually inspected the bridge for bat sign and potential bat roosts. Guano was found throughout the area under the bridge, especially along a joint and under two holes. It is likely that the guano around the joint, and other parts of the bridge, is from bats using the bridge for night roosting. The amount of guano that was present suggests that more than a single individual bat was using the bridge for roosting, and it may have been from bats that use the area seasonally and have since moved on. One dead bat, partially decomposed and desiccated, was found on the ground under the bridge. While the carcass was not positively identified to species due to level of decay and lack of skull, it is possibly a Mexican free-tailed bat (*Tadarida brasiliensis*) based on the size, tail length, and long toe hairs. Mexican free-tailed bats are known to migrate or change roosts seasonally, and they often have fairly large maternity roosts.

A single bat was observed emerging from a hole under the westbound side of the bridge, and one species, Yuma myotis (*Myotis yumanensis*), was recorded on the Petersson D500X ultrasound detectors that were placed at both ends of the bridge during the emergence survey. It is likely that the recorded bat call was from the bat that was seen emerging from the bridge during the emergence survey.

Based on the guano that was detected during the bat surveys, as well as the dead bat that was found under the bridge, it is possible that the Gilman Springs Road Bridge over Potrero Creek may support a seasonal Mexican free-tailed bat colony during the spring and summer seasons.

Bat roosting sign was detected within the BSA during the habitat assessment and emergence survey, and additional roosting bats could move into the area prior to construction. Work on or adjacent to suitable bat features, including the Gilman Springs Road Bridge over Potrero Creek, could harm cavity- and crevice-roosting bats directly during construction. In addition, the removal or trimming of trees that are suitable for foliage- and/or crevice-dwelling bats could harm roosting bats and reduce potential roosting habitat for these species (e.g., western yellow bat) or other crevice-dwelling species roosting in any trees containing snags, crevices, or peeling bark. Project impacts on bat species, should they be present during the time of construction, may also include temporary indirect disturbances, such as noise, vibration, dust, nighttime lighting,

and human encroachment from construction. However, these impacts are expected to be greatly reduced with implementation of the measures presented below.

Implementation of Measures **AMM BIO-19**, **AMM BIO-20**, and **AMM BIO-21** would reduce potential impacts on special-status bat species. No further avoidance and minimization measures or compensatory mitigation would be necessary. Impacts would be considered less than significant with mitigation.

Other Nonlisted Special-Status Wildlife Species

Suitable habitat to support nonlisted special-status wildlife species is present throughout the BSA, particularly within the Riversidian upland sage scrub, mulefat scrub, and unvegetated stream channel vegetation communities and land cover types. Nesting raptors could also use the mature nonnative trees within disturbed portions of the BSA.

During construction of the Project, potentially suitable habitat for non-listed special-status terrestrial reptiles—including southern California legless lizard, California glossy snake, coastal whiptail, San Diego banded gecko, red-diamond rattlesnake, and coast horned lizard—would be removed. Any temporarily removed Riversidian upland sage scrub habitat would be restored back to its original condition. The potential also exists for direct mortality during vegetation clearing and grading should these species be present, as well as indirect impacts (e.g., degradation of habitat through noise, dust, water pollution, human presence, increased fire risk) on potential habitat adjacent to the Project LOD during construction. Impacts on these species, should they be present, are expected to be temporary and would be minimized and avoided with implementation of the measures described in Section 2.4.3, *Avoidance, Minimization, and Mitigation Measures*.

Suitable habitat for foraging golden eagle is present in the BSA. No nesting habitat for this species is present. The Project will not substantially reduce foraging habitat for golden eagle given that construction will occur primarily along the roadway in areas with limited foraging capacity. Any foraging individuals would avoid the work area during construction. Therefore, substantial impacts on this species are not anticipated. Furthermore, avoidance and minimization efforts listed in Section 2.4.3, *Avoidance, Minimization and Mitigation Measures,* will reduce the potential for impacts on these species, if they were to be present during construction.

Nesting habitat for coastal cactus wren and loggerhead shrike is present within the Riversidian upland sage scrub habitat located throughout the BSA, and potentially suitable nesting habitat for white-tailed kite and purple martin is present within the mature trees located in the BSA. There could be temporary and permanent impacts on these species if nesting occurs within or adjacent to the BSA, including loss of nesting habitat, nest destruction, nest abandonment, disturbance from construction noise and activities, increased risk of predation, and degradation of suitable habitat. However, the avoidance and minimization efforts, including preconstruction nesting bird surveys and monitoring, will ensure impacts on nesting individuals of these species, should they be present, do not occur as a result of the Project.

Suitable habitat for San Diego black-tailed jackrabbit, Bryant's (San Diego desert) woodrat, southern grasshopper mouse, and America badger is present in the BSA within the Riversidian

upland sage scrub and unvegetated stream channel vegetation communities/land cover types. As a result, temporary and permanent impacts on these species could occur should they be present within the area during the time of construction work. Project construction could result in loss and degradation of suitable habitat, disturbance from construction activities, mortality of individuals during vegetation clearing and grading, and an increased risk of predation. Avoidance and minimization efforts listed in Section 2.4.3, *Avoidance, Minimization, and Mitigation Measures* will reduce the potential for impacts on these species, if they were to be present during construction.

Native bird species and their nests are protected under the MBTA and California Fish and Game Code. Swallow nests were detected at the Gilman Springs Road Bridge over Potrero Creek during field surveys performed for the Project. While cliff swallows are not considered special-status species, a specific AMM is required to prevent the Project from resulting in prohibited impacts on nesting swallows.

Measures **AMM BIO-4**, **AMM BIO-16**, and **AMM BIO-17** would ensure that there is no direct mortality of special-status wildlife species. Measure **AMM BIO-1**, **AMM BIO-14**, and **AMM BIO-15** would ensure there is no direct mortality of raptors and/or abandonment of nests with eggs and/or young, and the Project would comply with the MBTA and California Fish and Game Code. Implementation of Measures **SM BIO-2**, **AMM BIO-3**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **MM BIO-8**, **AMM BIO-9**, **AMM BIO-10**, **AMM BIO-13**, and **AMM BIO-22** would avoid potential indirect impacts on special-status wildlife species and their habitat within and adjacent to the Project LOD. No further avoidance and minimization measures or compensatory mitigation would be necessary for these species. Impacts would be considered less than significant with mitigation.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact.

Of the seven sensitive natural communities initially reviewed from the CNDDB database query, none were detected within the BSA; these include canyon live oak ravine forest, desert fan palm oasis woodland, southern coast live oak riparian forest, southern cottonwood willow riparian forest, southern mixed riparian forest, southern riparian scrub, and southern sycamore alder riparian woodland. All of the native vegetation communities mapped within the BSA are common; no natural communities of special concern that CDFW considers important were identified within the BSA. Therefore, none of these sensitive communities are discussed further. The BSA is composed primarily of Riversidian upland sage scrub, with small patches of mulefat scrub interspersed along the unvegetated channel of Potrero Creek (refer to Figure 2.4-1).



Legend

- Study Area (300-foot Buffer)
- Limits of Disturbance
- Permanent Impacts
- Temporary Impacts
- Criteria Cells

Vegetation Communities/Land Cover Types

- Developed
- Disturbed (Bare Ground)
- Disturbed (Ruderal)
- Mulefat Scrub
- Nonnative Woodland
- Riversidean Upland Sage Scrub
- Tamarisk Scrub
- Unvegetated Stream Channel

N

0 75 150 Feet

1:1,800

Figure 2.4-1
Vegetation Communities/Land Cover Types
Gilman Springs Road Bridge Replacement Project

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Project construction would result in permanent and temporary impacts on vegetation communities and land cover types within the BSA through disturbance and/or removal of existing vegetation (Table 2.4-1). Permanent impacts may include the removal of existing vegetation and encroachment into the vegetation communities that may have permanent effects. Temporary impacts may include incidental disturbances within construction areas, construction noise and dust, equipment staging areas, and temporary construction access routes.

Table 2.4-1 Impacts on Vegetation Communities/Land Cover Types within the Biological Study Area

Vegetation Community/ Land Cover Type	Permanent Impact (acre)	Temporary Impact (acre)
Riversidian Upland Sage Scrub	0.16	0.57
Mulefat Scrub	--	--
Tamarisk Scrub	--	--
Nonnative Woodland	--	0.09
Unvegetated Stream Channel	<0.01	0.17
Disturbed – Ruderal	--	--
Disturbed – Bare Ground	0.22	0.49
Developed	0.08	0.42
Total	**0.47**	**1.73**

Source: Data based on ICF GIS Calculations, May 2025.
"--" denotes no impact.

All Project impacts would be on either common native vegetation communities that are not classified as sensitive natural communities by CDFW or nonnative vegetation communities or land cover types. Because natural communities of special concern are considered absent from the BSA, no impacts on sensitive natural communities would occur, and no further action is required.

c) Would the project 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?

Less than Significant with Mitigation.

Jurisdictional delineations of aquatic resources were conducted in October 2023 (Caltrans 2024b). The jurisdictional study area (JSA) included a 100-foot buffer from the edge of the proposed permanent disturbance limits determined from the preliminary engineering design.

Based on the jurisdictional delineation, one feature, Feature 1, was observed and documented within the JSA that is potentially subject to the jurisdiction of USACE, RWQCB, or CDFW. Feature 1 consists of Potrero Creek, which is a sandy, ephemeral to intermittent channel that flows in a general northeast-to-southwest direction. Within the JSA, the channel bed is predominantly unvegetated with small patches of riparian habitat interspersed. The upstream portion of the feature is confined by a steep canyon before flowing under the bridge at Gilman

Springs Road. The floodplain widens and flattens on the south side of the bridge, then fans out as it exits the JSA. A full evaluation of this resource and representative photos can be found in the *Jurisdictional Delineation Report for the Gilman Springs Road Bridge Replacement Project* (Caltrans 2024b).

In total, 0.39-acre of USACE/RWQCB non-wetland WoUS, 0.60-acre of CDFW streambed, and 0.06-acre of CDFW riparian habitat were delineated within the JSA; no wetland WoUS are present (Table 2.4-2).

Table 2.4-2 Potential USACE, RWQCB, and CDFW Jurisdiction within the JSA

Feature	USACE/RWQCB		CDFW	
	Non-Wetland WoUS (acres)	Wetland WoUS (acres)	Streambed (acres)	Riparian (acres)
Feature 1	0.39	--	0.60	0.06
Total	**0.39**	--	**0.60**	**0.06**

Source: Data based on ICF GIS Calculations, November 2023.
CDFW = California Department of Fish and Wildlife; JSA = Jurisdictional Study Area; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers; WoUS = Waters of the United States; "--" = null value (zero).

Minor permanent and temporary impacts on USACE/RWQCB non-wetland WoUS (<0.01 acre and 0.13 acre, respectively) and CDFW unvegetated streambed (0.01 acre and 0.26 acre, respectively) would occur as a result of Project construction. Minor temporary impacts would also occur on CDFW riparian (0.01 acre) (Table 2.4-3). No USACE/RWQCB wetlands would be temporarily disturbed or permanently affected.

Table 2.4-3 Potential Project Impacts on USACE, RWQCB, and CDFW Jurisdictional Aquatic Resources

Feature	USACE/RWQCB[1]		CDFW			
	Non-Wetland		Streambed		Riparian	
	Permanent (acres)	Temporary (acres)	Permanent (acres)	Temporary (acres)	Permanent (acres)	Temporary (acres)
Feature 1	<0.01	0.13	0.01	0.26	--	0.01
Total	**<0.01**	**0.13**	**0.01**	**0.26**	**--**	**0.01**

Source: Data based on ICF GIS Calculations, May 2025.
[1] No USACE/RWQCB jurisdictional wetlands would be affected by the Project.
CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers. "--" denotes no impact.

Temporary indirect impacts may be caused by construction activities (e.g., dust, chemical spills, sedimentation, littering) on jurisdictional aquatic resources adjacent to the Project LOD, which could lead to temporary degradation of water quality. However, these impacts are expected to be greatly reduced with implementation of the avoidance and minimization efforts.

Non-wetland resources regulated by USACE and RWQCB, and potentially affected by the Project, are not State or federally protected wetlands; therefore, there would be no impact on wetlands and no significant wetland impacts under CEQA. However, impacts on USACE and

RWQCB non-wetlands and CDFW streambed and riparian resources would be considered significant absent mitigation.

Measures **SM BIO-2, AMM BIO-4**, **AMM BIO-5**, **AMM BIO-10**, **AMM BIO-11**, and **AMM BIO-12** (below) would be incorporated to avoid and minimize direct and indirect impacts on jurisdictional aquatic resources. Effects from permanent impacts on jurisdictional aquatic resources would be self-mitigated on site from the beneficial effects of lengthening the bridge and space between the abutments by approximately 48 feet, which would result in a net gain of approximately 0.11 acre in jurisdictional aquatic resources, rather than a loss. Therefore, offsite mitigation for permanent impacts on jurisdictional aquatic resources at Potrero Creek are not proposed as there is no net loss. Temporary impacts would be replaced in-kind at their current locations at a 1:1 ratio (Measure **MM BIO-24**). No coordination with the agencies has occurred to date; however, agency coordination would occur during the permitting phase. Additional avoidance, minimization, and/or mitigation measures may be required as part of the regulatory permitting-approval process. Implementation of these avoidance and mitigation measures would reduce the impacts on non-wetland waters of the state to less than significant. Therefore, impacts would be less than significant with mitigation. No additional AMMs or compensatory mitigation are required.

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

Less-than-Significant Impact.

Wildlife movement corridors are habitat linkages that connect suitable wildlife habitat areas in a region that is otherwise fragmented by development, disturbances, rugged terrain, and/or changes in vegetation communities. Natural features, such as canyon drainages, ridgelines, or areas with vegetation cover, provide corridors for wildlife movement, as do engineered structures, such as culverts and flood-control channels. Many wildlife species require large areas of habitat for foraging, finding burrowing/denning or nesting sites, and breeding. Wildlife movement corridors are important because they provide access to mates, food, and water; allow the dispersal of individuals away from high population density areas; and facilitate the exchange of genetic traits among populations (Beier and Loe 1992). Corridors are often used by juveniles dispersing to new territories, which avoids intraspecific competition in existing habitats and allows the recolonization of areas from which animals have become extirpated.

Areas surrounding and within the BSA provide opportunity for movement and landscape connectivity for a wide variety of species. The open spaces to the north and south of the BSA provide an opportunity for regional wildlife movement and migration, as well as vegetation for habitation, for many species of amphibians; reptiles; birds; and mammals such as southern mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), bobcat (*Lynx rufus*), coyote, Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), and skunk (*Mephitis mephitis*).

The area is open throughout the BSA and is unimpeded by fences or other artificial barriers, but the BSA is bisected by Gilman Springs Road, with steep hillsides along the northern side of the

road. The cliffs likely funnel wildlife that are moving north-to-south into Massacre Canyon within the northern portion of the BSA. Wildlife moving south-to-north could attempt to cross anywhere along the road due to lack of fencing or other barriers, but they would encounter a cliff and hillside barrier on the north side of the road. The steep hillsides likely make it more difficult for larger wildlife to quickly exit the roadway, and they would serve as a barrier to smaller wildlife and could trap them on the roadway. Overland travel between the northern and southern parts of the BSA outside of the Potrero Creek channel is generally not safe for terrestrial wildlife due to narrow shoulders, high vehicle velocities, and high levels of vehicular traffic throughout the day on Gilman Springs Road.

Existing connectivity corridors and linkages were identified within and adjacent to the BSA during the database and literature review, and they include Natural Landscape Blocks (Large and Natural Areas Small) as mapped by the California Essential Habitat Connectivity Project (Spencer et al. 2010). The BSA also occurs within Terrestrial Connectivity (Connectivity Rank 2 – Large Natural Habitat Areas) as defined by CDFW (2024b). No missing linkages (as mapped by the Missing Linkages: Restoring Connectivity to the California Landscape Project [Penrod et al. 2001] or the South Coast Missing Linkages Project [South Coast Wildlands 2008]) or Essential Connectivity Area (as mapped by the California Essential Habitat Connectivity Project [Spencer et al. 2010]) are located within the BSA.

The Project would not permanently affect existing wildlife movement within the BSA because it would not create new barriers to wildlife movement or permanently reduce or eliminate any existing connections. The widening of the Potrero Creek channel as a part of the proposed bridge replacement is expected to help improve wildlife movement by increasing the openness ratio of the crossing from 5.38 to 9.09, almost doubling the length of the bridge while keeping the width essentially the same and the height approximately 1 foot lower than current conditions (proposed 15.8-foot height versus current 16.7-foot height). The current arched bridge would also be replaced with vertical abutment walls and horizontally flat bridge bottom, further increasing the amount of open space under the bridge. Crossing conditions would also be improved by removing the rock riprap, maintaining a soft earthen bottom along the channel, and including a bench along the top of one of the wingwalls to provide a dry crossing under the bridge for small and medium-sized animals when water is present. All of this would result in a net benefit to this portion of Potrero Creek. Consequently, wildlife movement would not be negatively affected as a result of the Project and would instead result in a net benefit post-construction.

Construction work could temporarily affect wildlife movement within the BSA because of the increased presence of noise, equipment, and construction personnel, which may temporarily deter wildlife movement within the area. The biological monitor would ensure that all work is strictly limited to the Project boundaries, that all environmentally sensitive areas (ESAs) are fenced and avoided (Measure **AMM BIO-5**), and that equipment maintenance and staging only occurs in designated areas and does not block or impede movement through wildlife corridors (Measure **AMM BIO-23**). No Project-related construction is planned during nighttime hours. However, should nighttime construction activities occur, then night lighting would be shielded and/or directed away from natural lands, including Potrero Creek, in order to support wildlife movement functions during construction (Measure **AMM BIO-22**). The Project design does not include the addition of any new lighting to either the new bridge or realigned roadway. Temporal impacts on wildlife movement as a result of construction would be reduced through adding a

detail to the design plans to include a temporary construction fencing plan that is open under the falsework, which would allow wildlife movement during construction (Measure **AMM BIO-23**). Construction of the falsework would require approximately 2 to 3 weeks, during which the wildlife passage would be temporarily blocked under the bridge due to closed construction fencing required to ensure public safety (i.e., prevent entry during falsework construction). However, as with the current site conditions, wildlife would still be able to freely cross the road as there are no fences in the adjacent areas. Measures **AMM BIO-5**, **AMM BIO-22**, and **AMM BIO-23** would be included to avoid and minimize construction-related impacts on wildlife movement corridors, and wildlife movement would be expected to return to preconstruction conditions once construction activities are complete. No permanent impact on wildlife movement would occur as a result of the Project. Therefore, the impact would be less than significant. No additional AMMs or compensatory mitigation are required.

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

No Impact.

No resources protected by policies or ordinances protecting biological resources were identified within the BSA. Therefore, the impact would be less than significant with mitigation, and no further action is required.

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

Less than Significant with Mitigation

Western Riverside County Multiple Species Habitat Conservation Plan

The entire BSA for the Project is within the boundaries of the MSHCP. The Project is included as an existing facility that requires improvements under Volume 1 of the MSHCP, Section 7.3.5, *Planned Roads Within the Criteria Area*; therefore, the Gilman Springs Road Bridge over Potrero Creek replacement and roadway realignment are Covered Activities under the MSHCP.

The MSHCP fully addresses impacts under CEQA on the majority of the biological resources that have been identified as being potentially affected by the Project. To ensure consistency with the MSHCP, measures are presented in this section (and described in full in Section 2.4.3, Avoidance, Minimization, and Mitigation Measures), where appropriate, that follow the MSHCP requirements in Volume I, Sections 6.1.2 through 6.1.4, 6.3, and 7.5. For compliance with the MSHCP, a JPR package—including a Public Projects JPR Form, MSHCP Consistency Analysis Report, and DBESP Report—was prepared and submitted in February 19, 2025 to the Regional Conservation Authority and wildlife agencies to demonstrate Project consistency with the MSHCP.

WRC MSHCP Conservation Areas

The Project occurs within the boundaries of the SJVAP, Subunit 1: Gilman Springs/Southern Badlands, and it is located within Criteria Cell 2268 (Cell Group O). Additional Reserve Lands

(ARLs) are located along the southern border of the Project LOD within the Potrero Creek alluvial fan and surrounding uplands. ARL areas are also present along the northern edge of the 300-foot BSA buffer within the San Jacinto Mountains portion of the BSA. No PQP lands occur within the BSA.

ARLs are those lands under the MSHCP (Volume I, Section 3) that would help achieve assembly of the MSHCP reserve. Planned Covered Roads (Table 7-1 of the MSHCP) within the MSHCP allow take of ARLs owned by RCA, as long as the maximum road right of way width is not exceeded. All permanent Project design components and grading would occur outside of ARL areas within the County right-of-way; therefore, the Project would not result in any permanent impacts on ARLs. A total of 0.23 acre of ARL would be temporarily disturbed during Project construction activities. These areas would be returned to original conditions or better at their current locations through onsite restoration at a 1:1 ratio following an HMMP and Restoration Plan (Measure **MM BIO-8**). In addition, implementation of the avoidance and minimization measures described in Section 2.4.3 below, which are consistent with both Appendix C and Section 7.5.3 of the MSHCP, would ensure that the ARL areas adjacent to the Project LOD do not experience a loss of function and value as a result of the Project.

Because the Project involves improvements to an existing publicly maintained road under the MSHCP, the Project is not subject to the siting, design, and construction criteria in Section 7.5.1 of the MSHCP (Volume I, Section 7.5.1, Guidelines for the Siting and Design of Planned Roads within the Criteria Area and Public/Quasi-Public Lands). During Project design, improvements to the existing facility were reviewed to reduce impacts on MSHCP conservation lands to the maximum extent possible. All Project design components and grading would occur outside of ARL areas within County right-of-way and temporarily impacted areas would be restored, as described in the paragraph above.

WRC MSCHP Cores and Linkages

MSHCP cores and linkages are located within and adjacent to the BSA. The BSA occurs within the northern corner of MSHCP Proposed Constrained Linkage 21. No other MSHCP Connectivity Features are located within the BSA. Proposed Core 3 is located to the north of the BSA, Proposed Linkage 11 to the east, and Existing Constrained Linkage C to the south. A full evaluation of MSHCP cores and linkages can be found in the *MSHCP Consistency Analysis Report* (Caltrans 2025a).

Because MSHCP cores and linkages occur within and adjacent to the Project, the Project would comply with the guidelines in MSHCP Section 7.5.2, *Guidelines for the Construction of Wildlife Corridors*, and would be consistent with MSHCP Section 3.2.3, *Cores and Linkages within the MSHCP Conservation Area*.

The Project would not result in any long-term negative impacts on Proposed Constrained Linkage 21. The bridge replacement would improve connectivity by widening the Potrero Creek channel and increasing the openness ratio of the crossing from 5.38 to 9.09. The Project would also improve bad erosion conditions and add a crossing bench along the top of one of the wingwalls to provide a dry crossing under the bridge when water is present, as described under Section 2.4.2, Impact (d) above. All of this would result in a net benefit to this portion of Potrero

Creek and Proposed Constrained Linkage 21. Consequently, Proposed Constrained Linkage 21 would not experience a loss of connectivity function and value as a result of the Project, and would instead experience a net benefit in functions and values post-construction.

Riparian/Riverine Resources

The MSHCP Section 6.1.2 classification of *riparian/riverine resources* includes any areas that contain riparian vegetation, as well as any unvegetated areas that have flow year-round or for portions of the year, connect to downstream riparian habitats, and provide biological functions or values to MSHCP Covered Species. MSHCP Section 6.1.2 also includes vernal pools and fairy shrimp habitat, as well as habitat that serves to protect riparian bird species. Least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo are Covered Species under the MSHCP. However, additional survey requirements must be met for these species if potentially suitable habitat is present.

In compliance with the MSHCP, habitat assessments were performed for MSHCP riparian/riverine resources (including riparian birds), vernal pools, and fairy shrimp habitat. No suitable nesting or live-in habitat is present within the BSA to support riparian birds, including least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo (Appendix B). Therefore, focused surveys for riparian birds were not conducted. Although least Bell's vireo was incidentally detected during the field survey, no nesting, live-in or long-term foraging habitat is present for this species within the BSA. However, it is possible for the riparian habitat along Potrero Creek to be used as stopover and short-term foraging habitat by this species. Therefore, this species is discussed below. No vernal pools or fairy shrimp habitat was identified within the BSA; therefore, they are not discussed further.

Riparian/Riverine Areas

Based on both the jurisdictional delineation and vegetation mapping performed for the Project, it was determined that MSHCP riparian/riverine habitat is present within the JSA. MSHCP riparian resources within the JSA are equivalent to CDFW associated riparian vegetation, as well as riparian habitats that were mapped as a part of the vegetation communities mapping for the Project in May 2022 (i.e., mulefat scrub); in some cases, these resources overlapped. All MSHCP riverine resources within the JSA are equivalent to CDFW jurisdictional streambeds.

There is 0.65 acre of MSHCP riparian/riverine resources within the JSA, of which 0.07 acre is riparian and 0.58 acre is riverine. A full evaluation of riparian/riverine resources and representative photos can be found in the DBESP (Caltrans 2025b). MSHCP riparian/riverine resources within the JSA occur both inside and outside of the Project LOD, and Project-related impacts on MSHCP riparian/riverine resources would occur during construction. A total of 0.01 acre of riverine resources would be permanently removed under the Project, and a total of 0.26 acre of riverine resources and 0.01 acre of riparian resources would be temporarily disturbed; no riparian resources would be permanently removed under the Project. The potential also exists for short-term, temporary indirect effects from construction activities—including dust, increases in fire risks, introduction of invasive plant species, erosion and sedimentation, introduction of hazardous materials, and introduction of trash—on MSHCP riparian/riverine resources adjacent

to the Project LOD. These indirect effects would be avoided or minimized with the implementation of the measures described below.

The expansion of the channel, extension of the abutments, and removal of riprap would increase the amount of riparian/riverine resources in the area by approximately 0.11 acre since uplands would be converted to stream channel as part of the bridge lengthening. The channel would be re-contoured, old fill would be removed (including rock riprap), and new embankment walls would be added. The bottom of the channel would remain earthen and there would be no breaking of bedrock. In addition, reduced velocity may also encourage establishment of riparian habitat within the JSA portions of the drainage, which could provide more habitat for wildlife species, as well as increase nutrient retention, deposition, and toxicant trapping.

Because there would be no change in how the bridge over Gilman Springs Road at Potrero Creek would be used post-construction (e.g., volume of vehicles, drainage flow), and hydrologic conditions are expected to remain similar to current conditions (e.g., similar scour and velocity) following completion of the Project, the Project would not negatively affect the functions and values of downstream MSHCP conservation resources. The functions and values of the riparian/riverine resources are expected to be equal to or better than current conditions, given the similar scour rates, equal or reduced velocity, and increased riparian/riverine area. A detailed review of Project-related impacts on MSHCP riparian/riverine resources is provided under separate cover in the DBESP that was prepared for the Project (Caltrans 2025b).

To avoid or minimize potential direct and indirect impacts on MSHCP riparian/riverine resources, the following measures would be implemented under the Project: **AMM BIO-1**, **SM BIO-2**, **AMM BIO-3**, **AMM BIO-4**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **AMM BIO-9**, **AMM BIO-10**, **AMM BIO-11**, **AMM BIO-12**, **AMM BIO-13**, **AMM BIO-14**, **AMM BIO-16**, **AMM BIO-17**, and **AMM BIO-22**.

Effects from permanent impacts on riparian/riverine resources would be self-mitigated on site from the beneficial effects of lengthening the bridge and space between the abutments by approximately 48 feet, which would result in a gain of approximately 0.11 acre in riparian/riverine resources in the area, rather than a loss. No riparian resources would be permanently removed. Therefore, replacement lands for permanent impacts on riparian/riverine resources at Potrero Creek are not proposed as there would be no net loss. In addition, the bridge would be the same width and no increased effects from shading would occur (Measure **MM BIO-25**). The proposed temporary impacts on riparian/riverine resources from the Project would require restoration. A compensation ratio of 1:1 onsite restoration for temporary impacts on riparian/riverine resources of equal or better value would provide equivalent preservation and no net loss of these resources. All temporary impacts would be replaced in-kind at their current locations through restoration of the temporarily affected area to original grade and pre-Project conditions and hydroseeded with native species (Measure **MM BIO-8**).

Measure **MM BIO-8** and **MM BIO-25** would ensure no-net loss of MSHCP riparian/riverine resources. Implementation of Measure **MM BIO-25** would fully compensate for any impacts on MSHCP riparian/riverine resources and ensure that the functions and values of the riparian/riverine resources within the BSA following Project completion would be equivalent or superior to the functions and values of the existing site conditions.

With implementation of these measures, the Project would be consistent with MSHCP Section 6.1.2, *Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools*.

Riparian Birds

The riparian resources area along Potrero Creek contains riparian habitat and ephemeral flows. However, although it contains riparian tree and shrub species, the habitat present is scattered in small patches and is not extensive enough to support the listed riparian bird species that require additional surveys under the MSHCP if suitable habitat is present (i.e., least Bell's vireo, western yellow-billed cuckoo, southwestern willow flycatcher).

Southwestern willow flycatcher and western yellow-billed cuckoo were determined to have no potential for occurrence within the BSA due to lack of suitable habitat. Although riparian habitat does occur within the BSA, it is composed of small patches of mulefat scrub, which are not extensive or large enough to support these species. As such, it was determined that southwestern willow flycatcher and western yellow-billed cuckoo are absent from the BSA and that no impacts on either of these species would occur.

A single least Bell's vireo was incidentally detected outside of the 500-foot BSA buffer during the burrowing owl surveys performed for the Project. However, although it is possible for the riparian habitat along Potrero Creek to provide stop-over habitat for transient individuals or short-term foraging habitat for birds nesting in the regional vicinity, it does not provide any suitable nesting, live-in, or long-term foraging habitat for least Bell's vireo. Preventative avoidance and minimization measures will be implemented to avoid any possible impacts on this species, including avoiding vegetation clearing during the species' breeding season (Measure **AMM BIO-1**) and conducting preconstruction surveys if construction activities are to be performed during the breeding season for least Bell's vireo (Measure **AMM BIO-26**). These preventative measures would avoid any potential impacts on least Bell's vireo, should they be present. See Section 2.4.2, Impact (a) above for details. A detailed review of Project-related impacts on least Bell's vireo is provided under separate cover in the DBESP that was prepared for the Project (Caltrans 2025b).

WRC MSHCP Species

Two MSHCP survey areas occur within the BSA: MSHCP Burrowing Owl Survey Areas and MSHCP Mammal Species Survey Areas for San Bernardino kangaroo rat and Los Angeles pocket mouse. The Project does not occur within MSHCP-designated Amphibian Species Survey Areas or MSHCP Criteria Survey Areas.

Under the MSHCP, when a Project site is located within a Burrowing Owl Survey Area or Mammal Species Survey Area, further analysis is required (through additional surveys) prior to them being considered a Fully Covered Species. Therefore, protocol-level burrowing owl surveys and small mammal trapping surveys were performed for the Project. Although suitable habitat and burrows to support burrowing owl were observed within the BSA, neither burrowing owl nor its sign were detected, so this species is considered to be absent from the BSA (see Section 2.4.2, Impact (a) above for details). However, burrowing owls have been reported within the Project vicinity, and this species is highly mobile and could move into the Project site prior to

the start of Project construction. Los Angeles pocket mouse was detected within the BSA during small mammal live trapping surveys; San Bernardino kangaroo rat was not captured and is considered absent from the BSA (see Section 2.4.2, Impact (a) above for details). To ensure full compliance and consistency with MSHCP Section 6.3.2, and to ensure that no impacts occur on burrowing owl (should they be present) or Los Angeles pocket mouse, Measures **MM BIO-8**, **AMM BIO-12, AMM BIO-16**, **AMM BIO-17**, **AMM BIO-18**, and **AMM BIO-27** would be implemented. With implementation of these measures, the Project would be consistent with MSHCP Section 6.3.2, *Additional Survey Needs and Procedures*.

The Project is not located within any MSCHP Narrow Endemic Plant Species Survey Areas. Therefore, the Project would be consistent with MSHCP Section 6.1.3, *Protection of Narrow Endemic Plant Species*.

No special-status plant species that are Fully Covered Species under the MSHCP were detected during the rare plant focused survey. A total of 15 special-status wildlife species are Fully Covered Species under the MSHCP and have a potential to occur within the BSA: orange-throated whiptail, coastal whiptail, red-diamond rattlesnake, coast horned lizard, Cooper's hawk, golden eagle, Bell's (sage) sparrow, ferruginous hawk, coastal cactus wren, white-tailed kite, California horned lark, loggerhead shrike, coastal California gnatcatcher, purple martin, and San Diego black-tailed jackrabbit. In addition, southern California rufous-crowned sparrow, northwestern San Diego pocket mouse, and Bryant's (San Diego desert) woodrat—all MSHCP Fully Covered Species—were detected within the BSA during field surveys performed for the Project.

Project construction and operation may result in direct or indirect take of these species, should they be present. Because all of these species are fully covered under the MSHCP, no compensatory mitigation or avoidance efforts are necessary other than what is required to maintain consistency with the MSHCP's conservation goals. With the implementation of minimization measures and best management practices that are required under the MSHCP, no further measures would be necessary for these species. These measures include **AMM BIO-1 SM BIO-2**, **AMM BIO-3**, **AMM BIO-4**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **AMM BIO-9**, **AMM BIO-10**, **AMM BIO-11**, **AMM BIO-12**, **AMM BIO-13**, **AMM BIO-16**, **AMM BIO-17**, and **AMM BIO-22**. Nest clearance surveys, as described in Measure **AMM BIO-14**, and preconstruction protocol surveys for coastal California gnatcatcher, as described in Measure **AMM BIO-30**, would avoid potential impacts on nesting birds during construction. With implementation of these measures, the Project would be consistent with the MSHCP for all Covered Species.

WRC MSHCP Urban/Wildlands Interface

The Project is located within Criteria Cell 2268 (Cell Group O), and ARL occur within the BSA. As such, edge effects from drainage runoff, toxins, lighting, noise, invasives, barriers, and grading on conservation areas may occur as a result of Project development. Consequently, the Project will ensure that its implementation is consistent with MSHCP Section 6.1.4, *Guidelines Pertaining to the Urban/Wildlands Interface*, to avoid impacts on MSHCP conservation lands.

WRC MSHCP Consistency Determination

Project activities would not conflict with MSHCP conservation goals, and would be beneficial by adding additional riparian/riverine resource area, ensuring no net loss of these resources as a result of the Project, as well as improving connectivity by expanding the crossing and improving bad erosion conditions. Avoidance and minimization measures from MSHCP Volume I, Section 7.5.3, *Construction Guidelines*, and Appendix C, *Standard Best Management Practices*, would be implemented to reduce any indirect impacts on MSHCP resources adjacent to the Project work area and to ensure consistency with the MSHCP. With the implementation of these measures, the Project would avoid impacts on all MSHCP resources and conservation lands and would be fully consistent with MSHCP requirements (MSHCP Volume I §§ 3.2.3, 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.1, 7.5.2, and 7.5.3, and Appendix C).

A JPR package—including a Public Projects JPR Form, MSHCP Consistency Analysis Report, and DBESP—was prepared to demonstrate the Project's consistency with the MSHCP. The JPR package was submitted to USFWS, CDFW, and RCA for review and concurrence that the Project is fully consistent with MSHCP requirements.

Stephens' Kangaroo Rat Habitat Conservation Plan

The BSA falls within the Stephens' Kangaroo Rat HCP designated Potrero Core Reserve (Core Reserve). However, the Core Reserve occurs along the edge of the 300-foot BSA buffer outside of the Project LOD; therefore, the Project would not temporarily disturb or permanently remove any protected lands located within the Core Reserve. Furthermore, implementation of Measures **SM BIO-2**, **AMM BIO-3**, **AMM BIO-5**, **AMM BIO-6**, **AMM BIO-7**, **MM BIO-8**, **AMM BIO-9**, and **AMM BIO-13** would avoid any potential impacts on Core Reserve lands within and adjacent to the Project LOD. No further action is required. Therefore, the Project would not conflict with the plan and there would be no impact on the Core Reserve.

2.4.3 Avoidance, Minimization, and Mitigation Measures

The following avoidance, minimization, and mitigation measures from the *Natural Environment Study, Minimal Impacts* (August 2024), *MSHCP Consistency Analysis Report* (September 2025), and *DBESP Report* (September 2025)—as well as measures from Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.1, 7.5.2, and 7.5.3 and Appendix C of the MSHCP—will be implemented to avoid or minimize potential impacts on biological resources. With implementation of these measures, the Project would be consistent with the MSHCP.

AMM BIO-1: Vegetation Clearing Restrictions

Clearing of natural vegetation (including sage scrub) will be performed outside of the active breeding season for birds, as defined in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (March 1 through June 30) (MSHCP Volume I, Section 7.5.3), except for Riversidian sage scrub habitat judged to be potentially suitable and/or occupied by coastal California gnatcatcher and located within MSHCP Criteria Area and Additional Reserve Lands (ARL). For these areas, the habitat removal restriction is extended from June 30 to August 30. Should protocol surveys not

be performed to demonstrate coastal California gnatcatcher, and if the contractor is unable to abide by the March 1 to August 30 restriction, all project-related actions in the vicinity of suitable habitat will cease until the California Department of Transportation (Caltrans) contacts the Service and a biological opinion is issued to address impacts to the species. In addition, for riparian/riverine vegetation that could support least Bell's vireo, vegetation removal restrictions occur through September 15, unless the riparian/riverine vegetation is determined through protocol surveys to be unoccupied. If construction activities and disturbances to vegetation cannot be avoided during the active breeding season, Measures **AMM BIO-14**, **AMM BIO-26**, and **AMM BIO-30** are required (refer to Measure **AMM BIO-14** for the nesting bird survey requirements and Measures **AMM BIO-26** and **AMM BIO-30** for the least Bell's vireo and coastal California gnatcatcher preconstruction protocol survey requirements).

Table 2.4-4 Natural, Sage Scrub, and Riparian Vegetation Clearing Restrictions

Clearing Restriction	Natural Vegetation with Clearing Restriction
March 1–June 30	All natural vegetation communities
February 15–August 30[1]	Riversidian sage scrub[1]
March 1–September 15	Riparian habitats, including mulefat scrub

[1] Unless the Riversidian sage scrub habitat within the project survey area is negative for coastal California gnatcatcher by the preconstruction protocol surveys and authorization for vegetation clearance is confirmed by the wildlife agencies (see Measure **AMM BIO-30**).

SM BIO-2, Dust Control

Active construction areas will be watered regularly to control dust and therefore minimize impacts on adjacent vegetation.

AMM BIO-3, Fire Prevention

When work is conducted during the fire season (as identified by the Riverside County Fire Department), appropriate fire-fighting equipment (e.g., extinguishers, shovels, water tankers) will be available on the Project site during all phases of Project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities.

AMM BIO-4, Biological Monitoring

The qualified Project biologist will monitor construction activities for the duration of the Project at a frequency necessary to ensure that practicable measures are being employed and avoid incidental disturbance of habitat and species of concern outside the Project footprint. Special attention will be provided to ensure that environmentally sensitive area (ESA) fencing is maintained. Additionally, monitoring and reporting will occur weekly if active nests are present for the duration of the construction activity to ensure implementation of best management practices.

AMM BIO-5, Construction Limits and ESA Fencing

Construction personnel will strictly limit their activities, vehicles, equipment, and construction materials to the proposed Project footprint and designated staging areas and routes of travel. The construction area(s) will be the minimal area necessary to complete the Project and will be specified in the construction plans. Construction limits adjacent to sensitive areas will be demarcated using environmentally sensitive area (ESA) fencing (e.g., orange snow fencing, silt fencing, signage). The ESA fencing will be reviewed at a frequency deemed necessary by the biological monitor until the completion of all construction activities. For the ESA fencing installed within areas containing suitable habitat for Los Angeles pocket mouse, the fencing must exclude this species from entering the Project limits of disturbance (as indicated in Measure **AMM BIO-27**). Employees will be instructed that their activities are restricted to the construction areas. Access to sites will be from pre-existing access routes.

AMM BIO-6, Exotic Species

Exotic plant species removed during construction will be properly handled to prevent sprouting or regrowth. Vegetation removed from the Project site will be covered while being carried on trucks, and vegetation materials removed from the site will be disposed of in accordance with applicable laws and regulations.

For temporarily impacted areas, for the duration of construction, if construction activities are stopped for a duration of 30 days or greater, any lands disturbed and left bare will be inspected by a qualified restoration ecologist for growth of non-native plant species listed as Moderate or High by the California Invasive Plant Council (Cal-IPC) (e.g., stinknet [*Oncosiphon pilulifer*], tocalote [*Centaurea melitensis*]). If detected, these species, with the exception of non-native grasses, shall be removed within 5 days of detection. All material from species with a Cal-IPC rating of Moderate or High will be bagged, removed, and disposed of off site. This measure will only be required if Project construction is ceased for 30 days or more.

AMM BIO-7, Equipment Cleaning

Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds before mobilizing to the site and before leaving the site during the course of construction. The cleaning of equipment will occur at least 100 feet from environmentally sensitive area (ESA) fencing and any drainages to prevent the spread of invasives.

MM BIO-8, Revegetation of Disturbed Areas

Soil and vegetation disturbance will be minimized. Post-construction, any disturbed areas remaining as bare ground will be returned to original or better conditions.

To ensure that all areas remaining as bare ground post-construction are returned to original or better conditions, the following requirements will be met:

- Affected areas will be returned to natural contour grades, decompacted to eliminate compressed soils and allow for plant establishment, and replanted and/or hydroseeding, using native species sourced from a reputable nursery in the local area.

- Replanting may occur through hydroseeding and/or the use of container plantings, depending on the affected area and previous conditions prior to disturbance.

- All revegetated areas will avoid the use of any species listed on the California Invasive Plant Council's (Cal-IPC's) California Invasive Plant Inventory or in Table 6-2 of the Western Riverside County Multiple Species Conservation Plan (MSHCP), Volume 1, Section 6.

For temporarily disturbed areas containing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and/or Additional Reserve Lands (ARL), the following additional requirements must also be met:

- All temporarily impacted riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and ARL will be returned to original conditions or better through onsite restoration at a 1:1 ratio.

- Onsite, in-kind restoration of these affected areas would occur at their current locations upon completion of construction.

- A Habitat Mitigation and Monitoring Plan (HMMP) and Restoration Plan will be prepared for temporary impact areas containing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and/or ARL and must meet the following requirements:

    - Detailed specific onsite revegetation criteria, including, but not limited to, seed mix/potted plant size, planting palette, and stock sources; site preparation; planting techniques; watering requirements; plans to remove and control invasive plant species; requirements for maintenance and monitoring; success criteria metrics; identification of responsible parties; reporting requirements; and remedial measures in the event that revegetation standards are not met.

    - Detailed restoration plans and specifications with performance standards and monitoring requirements to ensure that the functions and values of the existing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and ARL are replaced with equivalent or superior resources.

    - Implementation for 5 years, with the potential for early sign-off as determined by Western Riverside County Regional Conservation Authority (RCA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW).

- Success criteria in the Habitat Mitigation and Monitoring Plan must include trapping and documentation to confirm that Los Angeles pocket mouse has re-occupied all habitat with long-term conservation value for the species that overlaps with existing ARL (not proposed ARL) once restoration has been completed.

- Reviewed and approval by RCA, USFWS, and CDFW prior to project implementation, including any vegetation removal, equipment staging, or ground disturbance.

AMM BIO-9, Weed Abatement Plan

A weed abatement plan will be developed to minimize the spread and importation of non-native plant material during and after construction, in compliance with Executive Order 13112. The plan will incorporate Measures **AMM BIO-6**, **AMM BIO-7**, and **MM BIO-8**.

AMM BIO-10, Water Pollution Control Plan

Plans for water pollution and erosion control (i.e., Storm Water Pollution Prevention Plan [SWPPP]) will be prepared in accordance with Project aquatic resource permits and other Project requirements. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. The SWPPP will be reviewed and approved by the County prior to construction. The following measures will be followed in the plans, as applicable, to ensure consistency with the Western Riverside County Multiple Species Conservation Plan (MSHCP):

- Water pollution and erosion control plans will be developed and implemented in accordance with Regional Water Quality Control Board (RWQCB) requirements and will ensure that no fluids or sediment from construction will enter the fenced environmentally sensitive areas (ESA) or flow off the Project site.

- Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.

- No erodible materials will be deposited into watercourses or areas demarcated with ESA fencing. Vegetation, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.

- If stream flows must be diverted, the diversions will be conducted using sandbags or other methods requiring minimal instream impacts as directed in Project permits. Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activity to minimize the transport of sediments off site. Settling ponds where sediment is collected will be cleaned out in a manner that prevents the sediment from reentering the stream (if applicable). Care will be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream. Short-term diversions will consider impacts on wildlife.

- Equipment storage, fueling, and staging areas will be located on non-sensitive upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas will be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions will be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials will be reported to appropriate entities, including, but not limited to, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the RWQCB, and will be cleaned up immediately and contaminated soils removed to approved disposal areas.

- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances will occur only in designated areas within the proposed grading limits of the Project site. These designated areas will be clearly marked and located in such a manner as to contain runoff and will be at least 50 feet from any drainage.

AMM BIO-11, Aquatic Resources Avoidance

The Project limits of disturbance, including the upstream, downstream, and lateral extents on either side of any stream adjacent to the Project impact footprint, will be clearly defined and marked in the field. A qualified biologist will review the Project limits of disturbance prior to initiation of construction activities. This will ensure avoidance of jurisdictional areas and riparian habitat.

AMM BIO-12, Biological Training

A qualified biologist will conduct a training session for Project and construction personnel prior to grading or staging. The training will include a description of the species of concern and their habitats, the general provisions of the Endangered Species Acts (Federal Endangered Species Act and California Endangered Species Act) and the Western Riverside County Multiple Species Conservation Plan (MSHCP), the need to adhere to the provisions of the acts and the MSHCP, the penalties associated with violating the provisions of the acts, and the general measures that are being implemented to conserve the species of concern as they relate to the Project.

AMM BIO-13, Waste Management

To avoid attracting predators of the species of concern, the Project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site(s). Waste, dirt, or rubble, or trash will not be deposited in a Western Riverside County Multiple Species Conservation Plan (MSHCP) Conservation Area or on native habitat.

AMM BIO-14, Nesting Bird Preconstruction Surveys

If construction commences during the bird breeding season, a preconstruction survey for nesting birds within suitable habitat will occur within 3 days prior to construction activities by an experienced avian biologist. The survey will occur within all suitable nesting habitat within the Project impact area and a 250-foot buffer where access is permitted. If nesting birds are found, an avoidance area of 500 feet for raptors and

special-status species and up to 100 feet for non-raptors will be established by a qualified biologist around the nest until it is determined that young have fledged or nesting activities have ceased. The Project site will need to be re-surveyed if there is a lapse in construction activities for more than seven days during the nesting season.

AMM BIO-15, Swallow Nest Removal and Exclusion Efforts.

Swallow nesting habitat at the Gilman Springs Road Bridge over Potrero Creek will be cleared of all swallow nests prior to any work conducted between February 1 and August 31. Swallow nests will be removed under the guidance of a qualified biologist prior to February 1, before swallows return to the nesting site. Prior to the removal of nests, the qualified biologist will inspect and ensure that no bats are roosting in the nests. Removal of swallow nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed, such as netting or a similar mechanism that keeps swallows from building nests. Nest removal and exclusion device installation will be monitored by a qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows, as well as swifts utilizing bridge weep holes, until August 31 or completion of construction.

AMM BIO-16, Sensitive Wildlife Preconstruction Clearance Surveys

A preconstruction sweep will be conducted by a qualified biologist each morning prior to clearing/grubbing or initial disturbance in areas of suitable habitat to support terrestrial wildlife. The goal of the survey will be to identify any special-status species not covered by the Western Riverside County Multiple Species Conservation Plan (MSHCP) that may be present within the Project footprint, and to remove the animal(s) from the Project footprint as possible to avoid any injury or mortality. No nesting birds will be flushed during the nesting season, as specified in Measures **AMM BIO-14** and **AMM BIO-15**. Bats will not be flushed but will be protected as specified in Measures **AMM BIO-19** through **AMM BIO-21**. Amphibians, reptiles, and burrowing wildlife will be relocated from the site of temporary or permanent impacts as feasible during preconstruction clearance surveys by the qualified biologist.

AMM BIO-17, MSHCP Covered Species Avoidance

During construction, the placement of equipment within a stream or on adjacent banks or adjacent upland habitats occupied by Western Riverside County Multiple Species Conservation Plan (MSHCP) Covered Species that are outside of the Project footprint will be avoided.

AMM BIO-18, Burrowing Owl Preconstruction Surveys

A 30-day preconstruction survey for burrowing owl is required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no burrowing owls have colonized the site in the days or weeks preceding the ground-disturbing activities. Preconstruction surveys will be conducted in the morning 1 hour before sunrise to 2 hours after sunrise or in the early evening 2 hours before sunset to 1 hour after sunset within areas providing suitable habitat for burrowing owl. The survey will include the proposed Project limits and a 500-foot buffer. If

burrowing owls are present within 500 feet of Project activities, the following measures will be implemented, as applicable:

- If burrowing owls have colonized the Project site prior to the initiation of ground disturbing activities, the qualified biologist will immediately inform and coordinate further with the wildlife agencies (i.e., California Department of Fish and Wildlife [CDFW] and U.S. Fish and Wildlife Service [USFWS]) and the Western Riverside County Regional Conservation Authority (RCA), including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. The Burrowing Owl Protection and Relocation Plan will provide any additional avoidance/minimization, relocation/exclusion, and monitoring methods that will be used, nest buffers, and any additional mitigation requirements, which may include the following:

    - If burrowing owl are found outside of the Project site but within 500 feet of Project activities during preconstruction take avoidance surveys during the nesting season, the burrowing owl will be fully avoided by establishing an appropriate buffer in coordination with RCA, CDFW, and USFWS. No work will occur within the buffered area until a qualified biologist has verified that burrowing owl young have fledged, or owls are no longer occupying the burrow.

    - If burrowing owl are found during preconstruction take avoidance surveys outside of the nesting season, passive relocation by a qualified avian biologist will be conducted once it has been confirmed that pairing activities are not observed. Passive relocation efforts will be conducted in coordination with RCA, CDFW, and USFWS.

    - If construction activities have ceased or the site has been left undisturbed for more than 30 days, a preconstruction survey must be repeated to ensure that burrowing owl has not recolonized the site. If burrowing owl is found, the same coordination described above will be necessary.

- Agency Approval – If burrowing owls have colonized the Project site prior to the initiation of ground disturbing activities, the Burrowing Owl Protection and Relocation Plan will be submitted for review to RCA, CDFW, and USFWS. Project construction or other ground-disturbing activities are not allowed to commence until the Burrowing Owl Protection and Relocation Plan has been approved by RCA, CDFW, and USFWS.

AMM BIO-19, Bat Roost Evictions and Exclusions

To avoid direct mortality, humane evictions and exclusions of roosting bats shall be performed under the supervision of a qualified bat biologist in the fall (September or October) prior to bridge demolition activities. Eviction/exclusion may be implemented in one or two phases at the discretion of the qualified bat biologist and in coordination with the Project contractor. To avoid potential mortality of flightless juvenile bats, evictions and exclusions of bats cannot be performed during the bat maternity season (April 1 through August 31) if any crevice habitat cannot be 100 percent inspected. Evictions

should not occur during winter months (generally November through February, but specifically periods during which nighttime temperatures are consistently less than 50°F).

AMM BIO-20, Tree Roosting Bat Avoidance

Prior to tree removal or trimming, large trees and snags shall be examined by a qualified bat biologist to ensure that no roosting bats are present. Palm frond trimming, if necessary, shall be conducted outside the maternity season (i.e., April 1 through September 1) to avoid potential mortality of flightless young.

If trimming or removal of mature trees and snags is necessary for Project construction, trimming/removal activities should be performed outside of the general bat maternity season, which occurs March 1 through October 1, to avoid direct effects to nonvolant (flightless) young that may roost in trees within the study area. If trimming or removal of trees during the general bat maternity season cannot be avoided, a qualified biologist will monitor tree removal unless nighttime surveys conducted within one week of removal indicates no tree-roosting bat activity within the study area.

- **Day 1:** Only trim the outermost fronds (no more than 50 percent of the palm fronds) using hand tools or chainsaws only (no dozers, backhoes, cranes, or other heavy equipment, other than to provide access for tree cutters using chainsaws).

- **Day 2:** The palm tree must be felled. Day 2 activities must occur the day immediately following the Day 1 activities. To accomplish this, work may need to be phased and Day 1/Day 2 steps can be repeated. Should bats emerge during the tree trimming, trimming activities must temporarily cease at the individual tree until bats are no longer actively emerging from the tree.

AMM BIO-21, Bat Maternity Roost Avoidance

The Gilman Springs Road Bridge over Potrero Creek shall be inspected for maternity roosts prior to the start of any construction activities if work is being performed during the maternity season (i.e., April 1 through August 31). If maternity sites are identified, construction activities at that location will not be allowed during the maternity season, unless a qualified bat biologist has determined that the young have been weaned. If maternity sites are present, and it is anticipated that construction activities cannot be completed outside the maternity season, then bat eviction and exclusion at maternity roost sites will be completed under the direction of California Department of Fish and Wildlife (CDFW) and the qualified bat biologist as soon as possible after the young have been weaned or outside the maternity season, or as otherwise approved by the qualified bat biologist in coordination with CDFW.

AMM BIO-22, Nighttime Lighting Minimization

Should nighttime construction activities occur, then night lighting shall be shielded and directed downward and away from the Western Riverside County Multiple Species Conservation Plan (MSHCP) Conservation Area, including the Potrero Creek drainage, to protect species from direct lighting and to minimize potential impacts on wildlife movement corridors. The MSHCP requires that shielding be incorporated in Project

designs to ensure ambient lighting in MSHCP Conservation Areas is not increased (MSHCP Volume I, Section 6.1.4).

AMM BIO-23, Wildlife Movement Corridors Avoidance

Equipment maintenance and staging will occur only in designated areas, and will not block or impede movement through wildlife corridors. Temporal impacts will be reduced through adding a specification to the design plans to include a 10-foot-wide opening during construction under the falsework that will allow for wildlife movement during construction. The contractor will develop a plan once falsework locations have been determined. This plan will be provided to Western Riverside County Regional Conservation Authority (RCA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW). In addition, the replacement bridge would add a crossing bench along the top of one of the wingwalls to provide a dry crossing for wildlife movement under the bridge when water is present.

MM BIO-24, Aquatic Resources Mitigation

Mitigation for permanent impacts on jurisdictional aquatic resources will occur on site as a result of the beneficial aspects of expanding the bridge length, which will involve expanding and recontouring the channel, extending the abutments, and removing old fill (including rock riprap). This would increase the aquatic resources habitat by at least a 3:1 ratio by converting uplands to stream channel, which will achieve a no net loss of jurisdictional aquatic resources. No offsite mitigation for permanent impacts is proposed. Temporary impacts on jurisdictional aquatic resources will be replaced in-kind at a 1:1 ratio at their current locations through onsite restoration of the temporarily affected area to pre-project conditions (e.g., natural grade recontouring, decompacted soils, replanting of native species via hydroseeding and/or container planting; see **MM BIO-8** for details).

MM BIO-25, Riparian/Riverine Resources Mitigation

Mitigation for permanent impacts on riparian/riverine resources will occur on site as a result of the beneficial aspects of expanding the bridge length, which will involve expanding and recontouring the channel, extending the abutments, and removing old fill (including rock riprap). This would increase the riverine habitat by at least a 3:1 ratio by converting uplands to stream channel, which will achieve a no net loss of riparian/riverine resources. No offsite mitigation for permanent impacts is proposed.

AMM BIO-26, Least Bell's Vireo Preconstruction Protocol Surveys

If Project-related ground-disturbing activities are anticipated prior to least Bell's vireo breeding season, a qualified biologist familiar with the species will follow established survey protocols to demonstrate species absence. Preconstruction surveys for least Bell's vireo will occur at the appropriate time of year. Preconstruction surveys will be performed in suitable riparian habitat and will include the proposed project limits and a 500-foot buffer. The surveys will adhere to the U.S. Fish and Wildlife Service (USFWS) guidelines for least Bell's vireo presence/absence surveys (USFWS 2001). If nesting activities or active nests are discovered, a buffer zone will be clearly marked by the biologist and no construction activities will occur within the buffer zone until the young

have fledged or the nest is no longer active. The buffer zone will be highly visible and maintenance of the buffer will be performed weekly, but more often if needed. The buffer zone will also take into account construction-related disturbances (e.g., increased noise levels, vibrations, human presence) that could negatively modify foraging or nesting behavior. In addition, all conditions under the 10(a) Incidental Take Permit that was issued for permittees of the Western Riverside County Multiple Species Conservation Plan (MSHCP) will be implemented for active least Bell's vireo nests. If take may occur, including negatively affecting least Bell's vireo foraging or nesting behavior, then consultation with Western Riverside County Regional Conservation Authority (RCA), USFWS, and California Department of Fish and Wildlife (CDFW) will be required.

AMM BIO-27, Exclusion Fencing for Los Angeles Pocket Mouse

Exclusion fencing will be installed around all areas with suitable habitat for Los Angeles pocket mouse (i.e., Riversidian upland sage scrub and unvegetated stream channel) that will be affected by Project construction. The qualified biologist experienced with Los Angeles pocket mouse will be present on site when the fence is installed to minimize the disturbance of Los Angeles pocket mouse burrows from the fence installation and to ensure that the exclusion fencing is installed correctly per the approved fencing plan design and specifications. Exclusionary trapping for Los Angeles pocket mouse will be conducted during the five nights preceding ground disturbance by a qualified biologist within Los Angeles pocket mouse suitable habitat areas where exclusionary fence is installed to remove all Los Angeles pocket mice prior to the start of any ground disturbance. Los Angeles pocket mice trapped in these areas will be released in suitable habitat areas, outside the construction limits, in the immediate Project vicinity. The exclusion fencing will remain in place for the duration of the project and will be installed in a manner that ensures that Los Angeles pocket mouse cannot access the construction site, including burrowing or crawling under or through the fence or climbing over the fence. The construction site will be monitored as appropriate by a qualified biologist to ensure that Los Angeles pocket mouse is not gaining access to the construction site. If individuals or their sign are detected within the fencing limits, then trapping and/or burrow excavation will be performed to remove any Los Angeles pocket mouse present within the site, and fencing will be repaired as needed. An Exclusion Fencing Design will be prepared and must be reviewed and approved by Western Riverside County Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) prior to project implementation.

AMM BIO-28, Crotch's Bumblebee Preconstruction Surveys

If Project work is to occur during the active Crotch's bumblebee season (February to October) or during the blooming season for flowering plants that support Crotch's bumblebee, then preconstruction surveys will be performed prior to the start of any Project construction or ground disturbance to ensure that Crotch's bumblebee is not active within the Project area. Surveys are to be conducted by a qualified biologist and shall follow the guidelines described in the *California Department of Fish and Wildlife (CDFW) Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species* (CDFW 2023). If this species is detected, then consultation with CDFW will be required.

AMM BIO-29, ESA Fencing for Crotch's Bumblebee

Prior to clearing or construction, environmentally sensitive area (ESA) fencing will be installed around all habitat that contains suitable soils and/or areas of annual flowering plants to support Crotch's bumblebee that are adjacent to the Project footprint to designate ESAs to be avoided (see Measure **AMM BIO-5**).

AMM BIO-30, Coastal California Gnatcatcher Preconstruction Protocol Surveys

If initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) occurs during the active breeding season for coastal California gnatcatcher (February 15–August 30), then a qualified biologist will conduct preconstruction protocol surveys for coastal California gnatcatcher during the breeding season prior to the start of ground-disturbing activities to ensure that the species is not nesting within the project area. Preconstruction protocol surveys will be conducted in suitable sage scrub habitat and will include the proposed project limits and a 500-foot buffer. The surveys will adhere to the U.S. Fish and Wildlife Service (USFWS) guidelines for coastal California gnatcatcher presence/absence surveys (USFWS 1997). If surveys are positive, then no vegetation clearing within suitable habitat can occur per Western Riverside County Multiple Species Conservation Plan (MSHCP) Volume I, Section 7.5.3. If surveys are negative, then confirmation from the wildlife agencies (i.e., USFWS and California Department of Fish and Wildlife [CDFW]) prior to start of any ground-disturbing activities would be required to proceed with vegetation clearing.

2.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

2.5.1 Regulatory Setting

Section 15064.5 of the CEQA guidelines defines historical resources as intact buildings, sites, structures, objects, and districts listed in or eligible for listing in the California Register of Historical Resources (CRHR), locally designated by a municipality, or included in a local survey that meets the requirements of PRC 5024.1(g). State Historic Landmarks (CHLs) No. 770 and all consecutively numbered CHLs following CHL No. 770 also qualify as historical resources. Under CEQA, a "significant impact" on cultural resources is considered to occur when a project would cause a "substantial adverse change in the significance" of a historical or archaeological resource, as defined in Section 15064.5 of the CEQA guidelines.

County of Riverside General Plan

The County recognizes the importance of protecting and preserving cultural resources for scientific, historic, and religious reasons to communities, descendant groups, and individuals of the County of Riverside. The *County of Riverside General Plan*, Multipurpose Open Space Element (County of Riverside 2015) contains the following policies relevant to cultural resources.

- **OS 19.1** Cultural resources (both prehistoric and historic) are a valued part of the history of the County of Riverside.
- **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. (AI 144)
- **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. (AI 145)
- **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.

2.5.2 Discussion of Environmental Evaluation Question 2.5 – Cultural Resources

The information used in this section is from the *Historic Property Survey Report for the Gilman Springs Road Bridge Replacement Project* (Caltrans 2024c).

The cultural resources study area (archaeology and built environment) was established based on the Project design and includes the limits of the current and proposed ROW, roadway realignment bridge demolition and realignment, placement of embankment walls, temporary construction easements, and a buffer to include potential indirect effects that may result from this undertaking. Road improvements would extend from approximately 0.31 mile southeast of State Route 79/Gilman Springs Road to a point approximately 0.07 mile south of the existing Gillman Springs Bridge overcrossing of Potrero Creek—a total length of 0.16 mile. The study area on the west and southwest side of Gilman Springs Road consists of the existing ROW, up to approximately 60 feet of new ROW width, and temporary construction easements, extending up to approximately 103 feet into adjoining parcels. The cultural resources study area on the east and northeast side of Gilman Springs Road consists of the existing ROW, up to approximately 25 feet of new ROW width, and temporary construction easements, extending up to approximately 65 feet from the edge of the existing roadway into adjacent parcels. The study area includes a total of approximately 2.26 acres. The vertical limits of disturbance would extend from approximately 6 feet below the existing ground surface (bgs) for the roadway to up to approximately 25 feet bgs for bridge abutments. The vertical limits of disturbance would extend to approximately 4 feet above the existing ground surface for the placement of a retaining wall along the southeast portion of the approach roadway. The Project would not require relocation of residences or businesses.

As part of the *Historic Property Survey Report*, a literature review and records search were conducted at the Eastern Information Center on October 23, 2024, and included the Project area with an additional 1-mile buffer. The literature review included a search of the Sacred Lands File by the Native American Heritage Commission (NAHC) to determine if there are any known tribal cultural resources (TCRs) in the Project vicinity. The literature review also included an examination of historical U.S. Geological Survey topographic maps of the Project area in order to inform expectations related to its historic-period archaeological sensitivity. An archaeological pedestrian survey was also conducted.

The results of the records search indicate that 25 studies have been conducted within a 1-mile radius of the cultural resources study area; 11 of these investigated a portion of the Area of Potential Effects (APE). Prior investigations have identified 7 previously recorded cultural resources within a 1-mile radius of the study area.

The record search yielded records for two historic built-environment resources within the cultural resources study area: Gilman Springs Road (P-33-021096) and Gilman Springs Bridge over Potrero Creek (P-33-006235; Bridge No. 56C-0523). In 2020, an ICF cultural resources specialist who meets the Secretary of the Interior's Qualifications Standards for Architectural Historian and Historian evaluated Gilman Springs Road and concluded that the resource does not qualify for listing in the California Register of Historical Resources (CRHR). Based on this evaluation, the County has determined that Gilman Springs Road (P-33-021096) does not qualify as a historical resource for the purposes of CEQA. The Caltrans Bridge Inventory classifies Gilman Springs Bridge over Potrero Creek (P-33-006235; Bridge No. 56C-0523) as Category 5, "bridge not eligible for the National Register of Historic Places." Based on this Category 5 classification, the County has determined that the bridge is individually ineligible for CRHR listing and does not qualify as a historical resource for the purposes of CEQA.

One archaeological site (P-33-000175) is adjacent to the Project cultural resources study area. The southern site boundary of P-33-000175 represents a buffer around a feature of the site (Feature 1) and was inspected closely during the archaeological pedestrian survey of the APE by an ICF cultural resources specialist who meets the Secretary of the Interior's Qualifications Standards for Archaeology. No cultural materials (either Native American or historical period) were identified within this buffer zone surrounding Feature 1, and there is no indication that constituents associated with the site are located in this area. Because this feature and the buffer surrounding it are outside the APE, and therefore in an area that would not be affected by construction activities associated with the Project, the entire site is excluded from the Project area.

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

Less-than-Significant Impact.

Determining the significance of impacts on archaeological and built environment historical resources is provided in State CEQA Guidelines Section 15064.5. According to CEQA, a project that causes a *substantial adverse change* in the significance of a *historical resource* or a *unique archaeological* resource has a significant effect on the environment (State CEQA Guidelines 15064.5, PRC Section 21083.2).

CEQA defines a substantial adverse change as follows.

- 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.

  Demolition or material alteration of the physical characteristics that convey the resource's historical significance and justify its designation as a historical resource.

Public agencies must treat any cultural resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant (14 California Code of Regulations 15064.5). A historic resource is considered significant if it meets the definition of a historical resource (as defined in PRC Section 5020.1(j)) or unique archaeological resource (as defined in PRC Section 21083.2).

As noted above, the two built environment resources within the cultural resources study area, Gilman Springs Road (P-33-021096) and Gilman Springs Bridge over Potrero Creek (P-33-006235; Bridge No. 56C-0523), do not qualify as historical resources pursuant to CEQA.

No recorded archaeological resources or unique archaeological resources are located in the Project area; impacts would be less than significant.

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

Less-than-Significant Impact.

No archaeological resources were identified within the Project area in the records search, and the pedestrian survey was negative for archaeological resources. The results of the historical topographic map review suggest that the Project area may be considered to have a low sensitivity for 20th-century archaeological materials. The results suggest that the Project is unlikely to encounter buried archaeological resources and unlikely to have an adverse impact on cultural resources. While archaeological site P-33-000175 is adjacent to the Project area, the archaeological survey did not identify any archaeological materials in the Project area near this resource. Additionally, the site would not be affected by construction activities associated with the Project, and the entire site is excluded from the Project area.

While it appears that no cultural resources would be directly affected by Project activities, there is always a possibility of encountering unanticipated buried archaeological materials during subsurface excavations, although it is considered low for this Project. **SM CR-1** through **SM CR-4**, as discussed in Section 2.5.3, *Avoidance, Minimization, and Mitigation Measures*, will be implemented during Project construction to avoid potential adverse impacts on previously undocumented cultural resources or human remains in the event of an unanticipated discovery. Impacts are considered less than significant.

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

Less-than-Significant Impact.

There are no known human burial grounds within or near the project area, and there is a low potential for human remains to be encountered during construction. **SM CR-2** will be implemented and would include steps for compliance with applicable State laws in the unlikely event that human remains are discovered during ground-disturbing construction activities. Impacts are considered less than significant.

2.5.3 Avoidance, Minimization, and Mitigation Measures

The following standard measures will be implemented to avoid or minimize potential impacts should cultural resources or human remains be unexpectedly discovered during construction.

SM CR-1

Due to the general archaeological sensitivity of the project vicinity, the County of Riverside will retain a qualified archaeologist and a Tribal Monitor(s) to provide archaeological monitoring during ground disturbing activities in areas of previously undisturbed and native soils. Specifically, the following measures will be implemented:

- The County of Riverside will retain a qualified professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards in archaeology, as promulgated in Code of Federal Regulations (CFR), Title 36, to oversee all monitoring work and supervise the archaeological monitor(s).

- Prior to the start of construction, a monitoring plan will be prepared that describes the nature of the archaeological monitoring work, procedures to follow in the event of an unanticipated discovery, and reporting requirements.

- The archaeological and Tribal Monitor will only be present onsite during construction that involves ground-disturbing activities such as, but not limited to, potholing, boring, grading, excavation, trenching, or drilling within previously undisturbed and native soils.

- Archaeological and tribal monitoring will not occur for work activities that include the demolition and removal of nonnative materials such as existing concrete, asphalt pavement, and pavement base layers, or ground-disturbing activities that occur within previously disturbed areas.

- If archaeological resources are encountered during construction, the contractor will:

    - Halt all work within a 60-foot radius and will immediately inform the Resident Engineer (RE), County representative, and Caltrans archaeologist.

    - Following notification, a qualified archaeologist will make a preliminary assessment of the discovery to determine whether the find is an isolated artifact or recent deposit. The archaeologist will have equipment and materials at the site with them to be able to record and document any discovery. If the find is determined to be isolated or recent, construction will be allowed to resume.

    - Should the archaeologist determine that the discovery is potentially significant, the archaeologist will evaluate the discovery and, if necessary, formulate appropriate mitigation measures after consultation with the County and Caltrans.

    - If the discovery contains Native American archaeological resources, all Native American Consulting Tribes will be contacted and informed of the discovery.

    - Additionally, if precontact or historic-era archaeological resources are encountered anywhere during project construction when no archaeologist is present, work in the area will halt within a 60-foot radius until a qualified

archaeologist can evaluate the nature and significance of the find and formulate appropriate evaluation or mitigation measures. Should the deposit contain Native American resources, the County will consult with Consulting Tribes as to how the deposit and any associated artifacts and features should be treated.

- Once the archaeologist has determined that the archaeological deposit has been sufficiently documented and recovered or removed and concluded that further construction activities would not affect additional archaeological deposits in the immediate area, construction activity can resume in that area.

- If an archaeological deposit or cultural resource has been found on site, there will need to be a location to be able to safely store the items on site. This can be an onsite secured field office trailer or a construction storage container.

- A final cultural resources report will be produced, which will discuss the monitoring program and its results and provide interpretations of any recovered cultural materials

SM CR-2

In the event that human remains are discovered at any time, during project activity, the following provisions will apply:

1. All ground disturbing activity will immediately be halted within 100 feet of the discovery. The County will be informed and will then immediately contact the Riverside County Coroner and the qualified archaeologist (if not already present). The County Coroner is to be contacted within 24 hours of discovery. The County Coroner has 48 hours to make his/her determination pursuant to California Health and Safety Code Section 7050.5 and California Public Resources Code (PRC) Section 5097.98. During these 48 hours, all remains, associated soils, and artifacts will remain in situ, undisturbed, and will be protected from public viewing. A physical barrier will be constructed on the perimeter of the protected 100-foot radius area. The County will take appropriate measures to protect the discovery site from disturbance during all procedures and negotiations. This shall include restricting access to the discovery site and if needed, hiring 24-hour security. No photographs are to be taken of the discovery except by the Coroner, with the permission of the Consulting Tribe(s).

2. In accordance with California Health and Safety Code Section 7050.5, if human remains are encountered no further disturbance will occur until the County Coroner has made a determination of origin of the remains and their disposition pursuant to California PRC Section 5097.98. If the remains are determined to be Native American, within 24 hours the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the County, the MLD may inspect the site of the discovery. The MLD will complete the inspection of the discovery within 48 hours of notification by the NAHC. The MLD shall make a recommendation for the final treatment and disposition, with appropriate dignity, of the remains and all associated funerary objects pursuant to California PRC Section 5097.98.

3. The qualified archaeologist will work with the MLD in regard to the treatment of the remains and all associated funerary objects and will ensure that any identified human remains will be secured while they are left in place and while treatment and disposition alternatives are being discussed. Information concerning the discovery and its location will not be disclosed pursuant to the specific exemption set forth in California Government Code Section 6254.5(e).

4. The County will relinquish ownership of all Native American ancestral remains and cultural resources, including but not limited to, sacred items and funerary objects, found within County right-of-way. One or more of the following procedures will be followed and the County will provide evidence of same:

    a. A fully executed reburial agreement with the appropriate culturally affiliated Native American tribe(s) or band(s). This will include measures and provisions to protect the reburial area from any future impacts. Reburial will not occur until all cataloguing and necessary recordation have been completed.

    b. A curation agreement with an appropriately qualified repository within Riverside County that meets federal standards per Code of Federal Regulations, Title 36, Part 79 will be established. The collections and associated records will be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation.

5. Should reburial of collected cultural items be preferred, it will not occur until after a Monitoring Report, and potentially a Data Recovery Report (if one is prepared), has been submitted to the County and reviewed by the Consulting Tribe(s). Should curation be preferred, the County is responsible for all costs. The qualified repository selected, the curation methods, and a complete catalog of the collection will be included in the Data Recovery Report.

6. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the County and MLD are in disagreement regarding the disposition of the remains, State law will apply, and the median and decision process will occur with the NAHC (see California PRC Sections 5097.98(e) and 5097.94(k)).

SM CR-3

Prior to any project-related ground disturbance, the County shall ensure that all construction workers conducting ground disturbing activities receive training overseen by a qualified professional archaeologist who meets the U.S. Secretary of Interior Standards (SOI). The archaeologist will conduct a Cultural Resource Sensitivity Training, in conjunction with the tribe's Tribal Historic Preservation Officer (THPO), and/or designated Tribal Representative. The training session will focus on the archaeological

and tribal cultural resources that may be encountered during ground-disturbing activities as well as the procedures to be followed in such an event.

SM CR-4

If precontact- or historic-era archaeological resources are encountered anywhere during project construction, all ground disturbing activities within a 60-foot radius must halt until a qualified archaeologist and Tribal Monitor(s) can evaluate the nature and significance of the discovery and formulate appropriate treatment measures.

The qualified archaeologist and the Tribal Monitor(s) will have the authority to temporarily divert and/or stop work in the area of discovery to allow for the evaluation of the discovery.

Isolates and clearly non-significant deposits will be documented in the field and collected so that monitored work can proceed.

If a potentially significant cultural resource(s) is discovered, an Environmentally Sensitive Area (ESA) physical demarcation/barrier shall be constructed. The qualified archaeologist will notify the County and Consulting Tribe(s) of said discovery. The qualified archaeologist, in consultation with the County, the Consulting Tribe(s), and the Tribal Monitor(s), shall determine the significance of the discovered resource.

Native American artifacts and finds suspected to be Native American in nature are to be considered as potential tribal cultural resources until the County has determined otherwise through consultation with Consulting Tribe(s). A recommendation for the treatment and disposition of the tribal cultural resource shall be made by the qualified archaeologist in consultation with the Tribal Monitor(s) and be submitted to the County for review and approval.

Potential treatments and dispositions of significant cultural resources can include:

- Full avoidance.
- If avoidance is not feasible, preservation in place.
- If preservation in place is not feasible, all items shall be reburied in an area protected from any future impacts and within a permanent conservation easement or Deed Restriction.
- If all other options are proven to be infeasible, data recovery through excavation and then curation in a Curation Facility that meets the Federal Curation Standards (36 CFR 79).

No monitoring will occur outside of the project limits; any artifacts that are found on private land that are outside of the project limits and outside of the County right-of-way may be relinquished to the Consulting Tribe(s) by the landowner for suitable curation or disposition. The Consulting Tribe(s) will need to facilitate the discussions between the landowner and themselves.

2.6 Energy

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

2.6.1 Regulatory Setting

State

California Environmental Quality Act

State CEQA Guidelines Section 15126.2(b) and Appendix F, *Energy Conservation*, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy or wasteful use of energy resources.

California Energy Commission

The California Energy Commission is the State's primary energy policy and planning agency. Created by the legislature in 1974, the commission has five major responsibilities.

- Forecasting future energy needs and keeping historical energy data
- Licensing thermal power plants 50 megawatts or larger
- Promoting energy efficiency through appliance and building standards
- Developing energy technologies and supporting renewable energy
- Planning for and directing the State's response to energy emergencies

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) requires the commission to prepare a biennial integrated energy policy report assessing major energy trends and issues facing the State's electricity, natural gas, and transportation fuel sectors. The report also provides policy recommendations to conserve resources, protect the environment, and ensure reliable, secure, and diverse energy supplies. The Final 2023 Integrated Energy Policy Report (IEPR) was issued in February 2024 (CEC 2024). The 2024 IEPR Update and 2025 IEPR are still being drafted but have not yet been adopted.

Southern California Association of Governments

The Southern California Association of Governments (SCAG) serves as the MPO for the region. The 2024–2050 RTP/SCS, adopted in 2024, and the Regional Comprehensive Plan are tools used for identifying the transportation priorities of the Southern California region. The policies and goals of both plans focus on the need to coordinate land use and transportation decisions to manage travel demand within the region. The Regional Comprehensive Plan lays out a strategy to reverse the current energy trends and diversify energy supplies to create clean, stable, and sustainable sources of energy. This strategy includes the reduction of fossil fuel consumption and an increase in the use of clean, renewable technologies.

Regional and Local

County of Riverside General Plan

The *County of Riverside General Plan*, Multipurpose Open Space and Air Quality Elements, establish the following applicable policies (County of Riverside 2015, 2018):

- **Policy 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.
- **Policy OS 16.3:** Implement public transportation systems that utilize alternative fuels when possible, as well as associated urban design measures that support alternatives to private automobile use.
- **Policy OS 16.8:** Promote coordination of new public facilities with mass transit service and other alternative transportation services, including bicycles, and design structures to enhance mass transit, bicycle, and pedestrian use.
- **Policy AQ 4.1:** Require the use of all feasible building materials/methods which reduce emissions.
- **Policy AQ-9.2:** Attain performance goals and/or VMT reductions which are consistent with SCAG's Growth Management Plan.
- **Policy AQ-14.1:** Emphasize the use of high occupancy vehicle lanes, light rail and bus routes, and pedestrian and bicycle facilities when using transportation facility development to improve mobility and air quality.
- **Policy AQ 29.2:** The County shall implement programs and requirements to achieve the following objectives related to reducing greenhouse gas emissions through improving energy efficiency for County facilities and operations.

    a. Improve the energy efficiency of all existing and new County buildings.

    b. Improve the energy efficiency of County infrastructure operation (roads, water, waste disposal and treatment, buildings, etc.)

    c. Decrease energy use through incorporating renewable energy facilities (such as, solar array installations, individual wind energy generators, geothermal heat sources) on County facilities where feasible and appropriate.

2.6.2 Discussion of Environmental Evaluation Question 2.7 – Energy

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

No Impact.

Construction

The Project would use a minimal amount of energy relative to overall energy consumption in Riverside County and the State of California during proposed construction activities, such as grubbing, land clearing, grading, excavation, paving, and other construction-related activities. Construction-related energy demand would likely be greatest during the grading/excavation phase because of energy use associated with the excavation, handling, and transport of soils to and from the site. Energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. Construction of the Project would require construction equipment, vehicles, and workers to complete the Project in a time- and cost-efficient manner. There are no unusual Project characteristics that would necessitate the use of construction equipment, building materials, or methods that would be less energy efficient than at comparable construction sites in the region or State.

The direct energy consumption from mobile sources associated with Project construction was calculated using emissions modeling outputs from CalEEMod, version 2022.1.1.29, which provides estimated carbon dioxide equivalent (CO_2e) emissions for the construction period. Construction-period CO_2e emissions were converted to equivalent gallons of diesel fuel and million British thermal units (BTUs). Fuel consumption for mobile sources was estimated by converting the CO_2e emission outputs using the rate of carbon dioxide (CO_2) emissions per gallon of combusted diesel (10.21 kilograms per gallon) (EPA 2023). The estimated fuel consumption was converted to BTUs, assuming an energy intensity of 138,700 BTU per gallon of diesel (Bureau of Transportation Statistics 2024). The overall energy use for construction of the Project is included below in Table 2.6-1.

Table 2.6-1 Project Energy Requirements during the Construction Period

Overall Construction Energy Use	Diesel Fuel Use (gallons)	Million BTUs
Energy Use during construction in 2025	3,205	44,287
Energy Use during construction in 2026	1,702	13,851
Total Project	4,907	58,138

Source: CalEEMod (version 2022.1) modeling and conversion calculations.
Notes: All figures have been rounded to the nearest 100.

Overall, California's diesel demand is projected to grow from 3.7 billion gallons in 2015 to 4.7 billion gallons in 2030 (CEC 2017). Although diesel fuel would be consumed by construction vehicles and equipment, the fuel consumption would be temporary in nature and represent only a negligible increase in regional demand, an insignificant amount relative to the 3.7 billion gallons

consumed in 2015. Comparing the calculated diesel fuel demand of Project construction to the statewide diesel demand of 3.7 billion gallons in 2015 indicates Project construction would represent 0.0006 percent of the statewide diesel demand. The diesel demand was compared to the 2015 statewide diesel demand to produce more conservative (i.e., higher) percentages of statewide demand compared to the projected diesel demand of 4.7 billion gallons in 2030. Regardless, the diesel demand of Project construction would be insignificant compared to the statewide diesel demand. Given the extensive network of fueling stations throughout the Project vicinity and the short-term (18-month) construction period, no new or expanded sources of energy or new infrastructure would be required to meet the energy demand associated with Project construction. As such, Project construction would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, no impacts are anticipated.

Operation

During operation, the Project would accommodate existing traffic demand, but it would not create new demand, directly or indirectly. The Project is a non-capacity-increasing project. Once reopened after construction, the proposed bridge will maintain the same number of lanes as the existing bridge. Therefore, the Project will not increase the volume of vehicles and will not increase operational emissions from vehicle traffic. Operation of the Project would also promote the flow of traffic. Therefore, operation of the Project is not expected to increase energy demand in the Project area. As such, operation of the Project is not expected to result in a wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, no impacts are anticipated.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact.

As summarized above, although temporary energy impacts could occur during construction of the Project, the total indirect energy impacts would not be substantial at the regional level, and the total Project impact on regional energy supplies would be minor. As such, the Project would not conflict with or obstruct a State or local renewable energy or energy efficiency plan. Therefore, no impacts are anticipated.

2.6.3 Avoidance, Minimization, or Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.7 Geology, Soils, and Paleontological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
VII. GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES: 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste-water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

2.7.1 Regulatory Setting

State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act of 1972 regulates the development and construction of buildings intended for human occupancy to avoid the hazard of surface fault rupture along known active faults. It defines criteria for identifying active faults, giving legal weight to terms such as *active*, and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones.

Seismic Hazards Mapping Act of 1990

The Seismic Hazards Mapping Act of 1990 is intended to minimize the loss of life and property by identifying and mitigating seismic hazards, such as those associated with strong ground

shaking, liquefaction, landslides, other ground failures, or other hazards caused by earthquakes. In addition, it requires cities and counties to regulate development within mapped seismic hazard zones.

California Environmental Quality Act

For geologic and topographic features, the applicable federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features." Topographic and geologic features are also protected under CEQA.

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils. Under California law, paleontological resources are protected by CEQA.

California Public Resources Code

PRC Section 5097.5 provides protection for paleontological resources on public lands in California, which are defined as lands owned by, or under the jurisdiction of, the State, or any city, county district, authority, or public corporation, or any agency thereof. Under PRC Section 5097.5, it is a misdemeanor for a person to knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any vertebrate paleontological site, including fossilized footprints, or any other paleontological feature situated on public lands without the express permission of the public agency having jurisdiction of the lands.

Regional and Local

County of Riverside

The *County of Riverside General Plan*, Multipurpose Open Space Element (County of Riverside 2015), includes the following policies to ensure that paleontological resources are appropriately considered:

> **Policy OS 19.6:** Whenever existing information indicates that a site proposed for development has high paleontological sensitivity as shown on Figure OS-8 [of the *County of Riverside General Plan*], a paleontological resource impact mitigation program (PRIMP) shall be filed with the Riverside County Geologist prior to site grading. The PRIMP shall specify the steps to be taken to mitigate impacts to paleontological resources.
>
> **Policy OS 19.7:** Whenever existing information indicates that a site proposed for development has low paleontological sensitivity as shown on Figure OS-8 [of the *County of Riverside General Plan*], no direct mitigation is required unless a fossil is encountered during site development. Should a fossil be encountered, the Riverside 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 [of the *County of Riverside General Plan*], a report shall be filed with the Riverside County Geologist documenting

the extent and potential significance of the paleontological resources prior to approval of that department.

Policy OS 19.9: Whenever paleontological resources are found, the Riverside County Geologist shall direct them to a facility within Riverside County for their curation, including the Western Science Center [WSC] in the City of Hemet.

2.7.2 Discussion of Environmental Evaluation Question 2.7 – Geology, Soils, and Paleontological Resources

The analysis in this section was supported in part by the *Preliminary Foundation Report Gilman Springs Road Bridge over Potrero Creek (Replace) Bridge No. 56C0523 Riverside County, California* report dated June 18, 2024 (PFR; Earth Mechanics, Inc. 2024). The PFR was prepared to provide preliminary geotechnical information to assist the structural designers in the selection process for replacement of the Gilman Springs Road Bridge. In addition, the conclusions and findings identified in the *Gilman Springs Road Bridge Replacement Project Archaeological Survey Report*, *Riverside County, California* report dated September 2024 (ASR; Caltrans 2024d) were used to support the analysis under threshold f), below. The purpose of the survey report was to meet standards outlined in Section 106 of the National Historic Preservation Act of 1966.

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact.

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazards of surface faulting to structures. Under this act, the California State Geologist identifies areas in the State that are at risk from surface fault rupture. The main purpose of the act is to prevent construction of buildings used for human occupancy where traces of active faults are evident on the Earth's surface. Impacts from fault rupture are limited to the immediate area of the fault zone, where the fault breaks along the surface, unlike damage from ground shaking, which can occur at great distance from the fault. Such a rupture could potentially displace or deform the ground surface. According to the PFR, the Project site is located within the Earthquake Fault Zone of the San Jacinto Fault. The closest segment of the San Jacinto Fault to the site is the Claremont Fault, which has three mapped traces passing through the Project site. Therefore, it was determined that there is high potential for fault rupture to have an impact on the Project in the event of a ground rupturing earthquake on the Claremont Fault. However, it should be noted that the Project does not include any features that would cause, contribute to, or exacerbate a fault rupture event on site.

Although the potential exists for fault rupture within the Project site, the Project would replace the existing bridge over Potrero Creek; as such, it would not feature a substantial number of

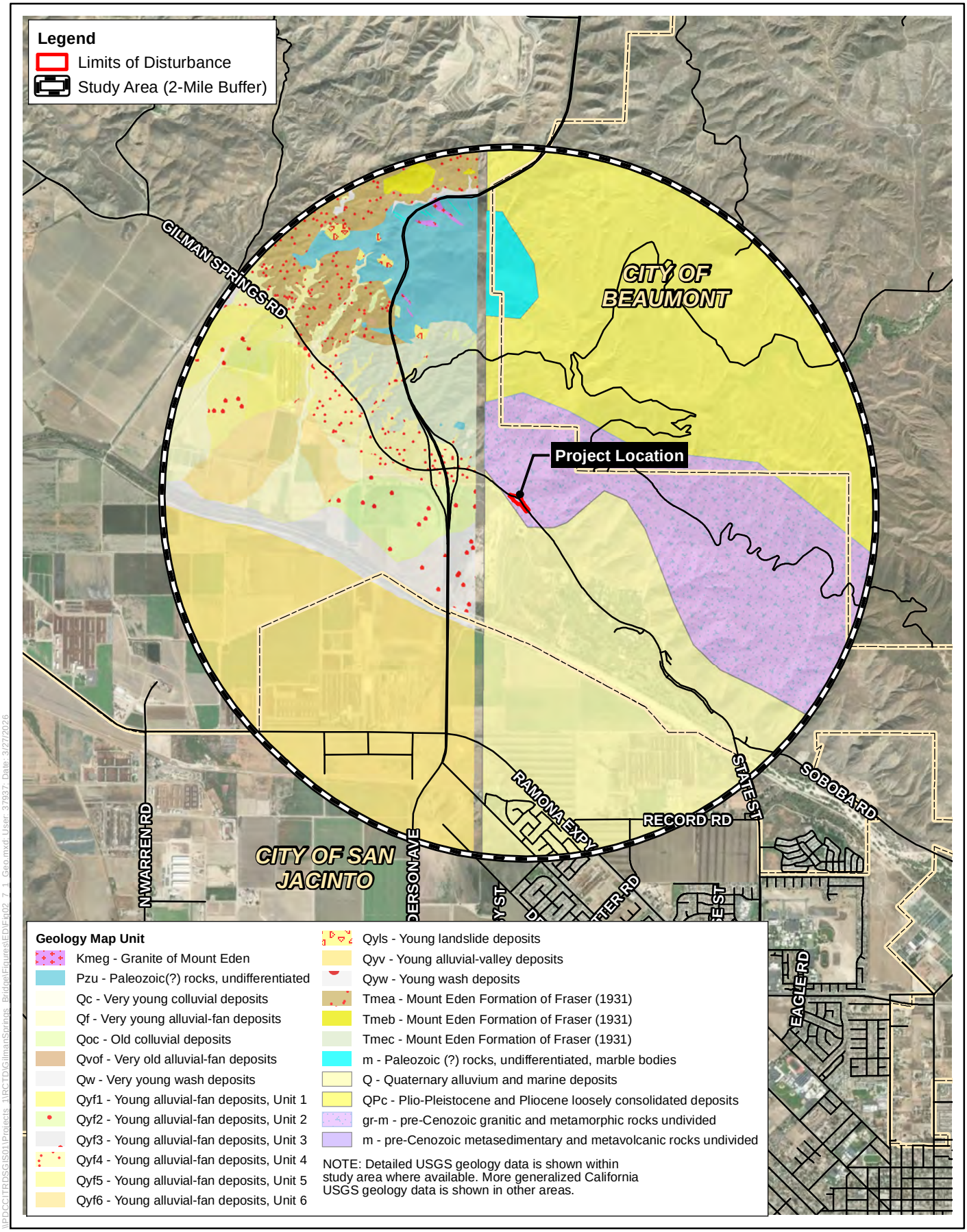
people needed to construct or operate the Project, or any structures meant for human occupancy in the short or long term. Implementation of the Project would not include a significant ground rupture risk greater than what is a part of existing conditions. On the contrary, the new bridge would be built with up-to-date building codes and would adhere to current standard seismic design practices. It would also implement site-specific recommendations found in Section 10.0, *Geotechnical Recommendations,* of the PFR. In addition, and as stated in the PFR, further onsite geotechnical testing would occur prior to construction. Findings and conclusions identified in the additional analysis would be considered in the bridge design. Furthermore, given the nature of the Project, neither phase is anticipated to exacerbate existing geological conditions, including those associated with potential fault rupture. No impact would occur.

ii) Strong seismic ground shaking?

No Impact.

As with most of Southern California, the Project site would be subject to strong ground shaking in the event of a major earthquake. Strong seismic shaking effects on the Project area (resulting from large earthquakes originating from nearby faults) can include landslides, ground cracking, and settlement. These effects are a possibility throughout Southern California and are dependent on the distance between the Project area and the causal fault and onsite geology. The nearest substantial local sources of earthquakes are the San Jacinto Fault Zone, the Whittier-Elsinore Fault Zone, and the San Andreas Fault and; therefore, the Project could be subject to future seismic shaking and strong ground motion resulting from seismic activity (see Figure 2.7-1).

However, implementation of the Project would not include a significant seismic ground shaking risk greater than what is a part of existing conditions. On the contrary, the new bridge would be constructed per up-to-date building codes and would adhere to current standard seismic design practices. It would also implement site-specific recommendations found in Section 10.0, *Geotechnical Recommendations*, of the PFR. In addition, and as stated in the PFR, further onsite geotechnical testing would occur prior to construction. Findings and conclusions identified in the additional analysis would be considered in the bridge design. Furthermore, the Project would not feature a substantial number of people or any structures meant for human occupancy in the short or long term, and operation of the Project is not anticipated to exacerbate existing geological conditions, including those associated with seismic shaking. No impact would occur.



N

0 2,000 4,000 Feet

1:48,000

Source: USGS 2005 & 2006; ESRI Imagery

Figure 2.7-1
Geological Map
Gilman Springs Road Bridge Replacement Project

iii) Seismic-related ground failure, including liquefaction?

No Impact.

Liquefaction occurs when saturated, low-density, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction more often occurs in areas underlain by silts and fine sands and where shallow groundwater exists. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

According to the PFR, onsite soils located above bedrock and below the groundwater are assumed to be liquefiable. Therefore, the PFR recommends liquefiable soil be removed so liquefaction would not factor into the design of the bridge. The PFR also states that subsurface conditions related to liquefaction would need to be confirmed using additional site-specific soil borings and groundwater data (after approval of the bridge type selection). Moreover, the Project would consist of a bridge replacement and, as such, would not feature a substantial number of people or any structures meant for human occupancy in the short or long term. Also, implementation of the Project would not include an increase in liquefaction risk compared to existing conditions. On the contrary, the new bridge would be built with up-to-date building codes and would adhere to current standard seismic design practices. It would also implement site-specific recommendations found in Section 10.0, *Geotechnical Recommendations*, of the PFR. In addition, and as stated above, further onsite geotechnical testing would occur prior to construction. Findings and conclusions identified in the additional analysis would be considered in the bridge design. Furthermore, the Project would not feature a substantial number of people or any structures meant for human occupancy in the short or long term, and operation of the Project is not anticipated to exacerbate existing geological conditions. No impact would occur.

iv) Landslides?

No Impact.

Liquefaction occurs when saturated, low-density, loose materials (e.g., sand or silty sand) are weakened and transformed from a solid to a near-liquid state as a result of increased pore water pressure. The increase in pressure is caused by strong ground motion from an earthquake. Liquefaction more often occurs in areas underlain by silts and fine sands and where shallow groundwater exists. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

According to the PFR, onsite soils located above bedrock and below the groundwater are assumed to be liquefiable. Therefore, the PFR recommends liquefiable soil be removed so liquefaction would not factor into the design of the bridge. The PFR also states that subsurface conditions related to liquefaction would need to be confirmed using additional site-specific soil borings and groundwater data (after approval of the bridge type selection). Moreover, the Project would consist of a bridge replacement and, as such, would not feature a substantial number of

people or any structures meant for human occupancy in the short or long term. Also, implementation of the Project would not include an increase in liquefaction risk compared to existing conditions. On the contrary, the new bridge would be built with up-to-date building codes and would adhere to current standard seismic design practices. It would also implement site-specific recommendations found in Section, 10.0 *Geotechnical Recommendations*, of the PFR. In addition, and as stated above, further onsite geotechnical testing would occur prior to construction. Findings and conclusions identified in the additional analysis would be considered in the bridge design. Furthermore, the Project would not feature a substantial number of people or any structures meant for human occupancy in the short or long term, and operation of the Project is not anticipated to exacerbate existing geological conditions. No impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less-than-Significant Impact.

Site clearing and grubbing, earthmoving activities, and excavation during construction would result in soil disturbance, rendering surface soil susceptible to erosion. Similarly, compaction of soils by heavy construction machinery may reduce the infiltration capacity of soils exposed during construction and increase runoff and erosion potential. During construction, the contractor would implement standard construction BMPs that would include erosion-control measures (as necessary)—such as silt fencing, gravel sandbag barriers, and straw wattles—to control runoff and erosion during construction activities. Moreover, the Project is a bridge replacement project and does not include any long-term feature that would expose Project area soils to erosional processes during operations. Impacts would be less than significant.

c) Would the project 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 offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less-than-Significant Impact.

Collapsible soils are those that undergo settlement upon wetting, even without the application of additional load, which occurs when water weakens the bonds between soil particles and reduces the bearing capacity of that soil (known as hydrocompaction). Collapsible soils are typically associated with alluvial fans, windblown materials, or colluvium. Soil collapse can occur when the land surface is saturated to depths greater than those reached by typical rain events. This saturation eliminates the clay bonds that hold the soil grains together. Land subsidence in California generally occurs in areas where fluid (petroleum and groundwater) removal has occurred; in arid areas, this is due to hydrocompaction of loose near-surface soils. Land subsidence is a gradual settling or sudden sinking of the surface, owing to subsurface movement of Earth materials. According to the PFR, subsurface soils consist of approximately 30 to 50 feet of alluvial soils (a mix of medium dense clayey sand and stiff to very stiff sandy clay) over very dense clayey sand with interbedded hard sandy clay. Cracks have been observed in the roadway at the bridge site (subsidence associated with surficial ground cracking due to ground-water withdrawal). The PFR concluded that subsidence (due to the aforementioned groundwater withdrawal) has preferentially occurred along the fault traces on site. However, no cracking was observed during the site visit portion of the report.

The potential for liquefaction and landslides is discussed above under Response (a). Although it is possible that unstable geologic units or soils are found within the Project area's subsurface, the Project would not feature a substantial number of people, or any structures meant for human occupancy in the short or long term. Implementation of the Project would not include an increase in geologic hazard risk compared to existing conditions. On the contrary, the new bridge would be built with up-to-date building codes and would adhere to current standard seismic design practices. It would also implement site-specific recommendations found in Section 10.0, *Geotechnical Recommendations*, of the PFR. In addition, further onsite geotechnical testing would occur prior to construction, and findings and conclusions identified would be considered in the bridge design. Lastly, due to its nature, the Project would not exacerbate existing geological conditions. Impacts would be less than significant.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less-than-Significant Impact.

Expansive soils are typically composed of clays and can undergo a volume change with changes in moisture content. They have tendencies to expand and soften when wet and harden when dry. If not properly considered prior to the construction of structures, this expansive behavior can damage foundations and other building components.

As noted above under threshold c), soils within the Project footprint likely contain a mix of medium dense clayey sand, stiff to very stiff sandy clay, and very dense clayey sand with interbedded hard sandy clay. As mentioned, soils containing clay can undergo a change in volume when exposed to moisture. Although it is possible that soils with expansive characteristics are found in the Project area, the Project is a bridge replacement project and would not feature a substantial number of people or any structures meant for human occupancy in the short or long term. Implementation of the Project would not include an increase in soil expansion risk compared to existing conditions. The new bridge would be built with up-to-date building codes and would adhere to current standard seismic design practices. It would also implement site-specific recommendations found in Section 10.0, *Geotechnical Recommendations*, of the PFR. In addition, further onsite geotechnical testing would occur prior to construction, and findings and conclusions identified would be considered in the bridge design. Furthermore, the Project does not include any features that would exacerbate expansive soil characteristics of any onsite soils. Impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact.

The Project would replace the existing bridge over Potrero Creek. As such, no septic tanks or alternative wastewater disposal systems are being proposed as part of the Project. No impact would occur.

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

Less-than-Significant Impact.

The *County of Riverside General Plan*, Multipurpose Open Space Element, Figure OS-8 (County of Riverside 2015) indicates that the Project site is located in an area considered to have high sensitivity for paleontological resources. While not mapped within the boundaries of the Project site, modern artificial fill materials are likely present immediately below the Project site due to previous roadway construction. These disturbed fill sediments could contain fossil materials that were unintentionally introduced during earlier excavations. However, such fossil materials would be removed from their original geologic and stratigraphic contexts and therefore would not be of paleontological interest or significance. Modern artificial fill deposits may be encountered during Project construction and are considered to have a low paleontological sensitivity due to their disturbed nature.

In order to address the potential for discovery of paleontological resources, should they be uncovered during construction, a Paleontological Mitigation Plan (PMP) as described below under Section 2.7.3, *Avoidance, Minimization, and Mitigation Measures*, as **SM GEO-1**, will be prepared prior to any ground disturbance at the project site. Should paleontological resources be unearthed unexpectedly during construction, the PMP will be implemented. Implementation of the PMP will reduce potential adverse impacts on paleontological resources as a result of project-related construction and grading to a less-than-significant level, in accordance with CEQA. Impacts would be less than significant.

Paleontological monitoring is not required during any ground-disturbing activities determined to be entirely within modern artificial fill.

2.7.3 Avoidance, Minimization, and Mitigation Measures

The following standard measure will be implemented to address potential paleontological resource impacts should they be unearthed unexpectedly during construction.

SM GEO-1

Prior to any ground disturbance at the project site, a Paleontological Mitigation Plan (PMP) will be prepared by a qualified professional paleontologist. Should paleontological resources be unearthed unexpectedly during construction, the PMP will be implemented. The PMP will follow the guidelines and recommendations of the Society of Vertebrate Paleontology. The PMP details the requirements for paleontological monitoring:

- The qualified paleontologist will consult with the grading and excavation contractors.
- Paleontological monitoring will be conducted for ground-disturbing activities in areas outside of modern artificial fill.

- The paleontological monitor has the authority to temporarily halt or redirect construction or grading work to evaluate potential paleontological resources. When work is halted or redirected, the Principal Paleontologist will be contacted immediately, and will implement the notification, documentation, evaluation, and treatment procedures outlined in the PMP as expeditiously as possible to avoid potential project delays.

- The qualified paleontologist or paleontological monitor will salvage and recover paleontological resources should any be discovered.

- Monitors will document the progress of construction through photography, field notes, and GPS mapping.

- A final summary report will be completed for the findings and significance of any salvaged or recovered paleontological resource.

2.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

2.8.1 Regulatory Setting

State

California has adopted statewide legislation addressing various aspects of climate change and GHG-emissions mitigation. The legislation establishes a broad framework for the State's long-term GHG-reduction and climate change–adaptation program. Various California governors have also issued several EOs related to the State's evolving climate-change policy. Summaries of key policies, regulations, and legislation at the State level that are relevant to the Project are described below.

Assembly Bill 1493

With the passage of Assembly Bill (AB) 1493 (referred to as Pavley I) in 2002, California launched an innovative and proactive approach to dealing with GHG emissions and climate change at the State level. AB 1493 requires CARB to develop and implement regulations to reduce automobile and light-truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the model year 2009. Although litigation challenged these regulations, and EPA initially denied California's related request for a waiver, the waiver request was granted.

Executive Order S-3-05

On June 1, 2005, Governor Arnold Schwarzenegger signed EO S-3-05. The goal of this EO was to reduce California's GHG emissions to (1) 2000 levels by 2010; (2) 1990 levels by 2020; and (3) 80 percent below the 1990 levels by 2050. EO S-3-05 also calls for the California Environmental Protection Agency to prepare biennial science reports on the potential impact of continued global warming on certain sectors of the California economy. As a result of the scientific analysis presented in these biennial reports, a comprehensive Climate Adaptation Strategy was released in December 2009, following extensive interagency coordination and stakeholder input. The latest of these reports, the Climate Action Team Biennial Report, was published in December 2010.

Assembly Bill 32

One goal of EO S-03-05 was further reinforced by AB 32 (Chapter 488, Statutes of 2006), the Global Warming Solutions Act of 2006, which requires the State to reduce GHG emissions to 1990 levels by 2020. Since AB 32 was adopted, CARB, the California Energy Commission, the California Public Utilities commission, and the Building Standards Commission have been developing regulations that would help meet the goals of AB 32. Under AB 32, CARB is required to prepare a Scoping Plan and update it every 5 years. The Scoping Plan was approved in 2008, the first update approved in 2014, and an additional update was approved in 2017 (see discussion of SB 32, below). The Scoping Plan identifies specific measures for reducing GHG emissions to 1990 levels by 2020 and requires CARB and other State agencies to develop and enforce regulations and other initiatives for reducing GHGs. Specifically, the AB 32 Scoping Plan articulates a key role for local governments, recommending they establish GHG-reduction goals for both their municipal operations and the community that are consistent with those of the State.

Executive Order S-01-07 – Low Carbon Fuel Standard

With EO S-01-07, Governor Schwarzenegger set forth the Low Carbon Fuel Standard (LCFS) for California in 2007. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020. In September 2018, the LCFS regulation was amended to increase the statewide goal to a 20-percent reduction in carbon intensity of California's transportation fuels by at least by 2030.

Senate Bill 375

SB 375, signed into law by Governor Schwarzenegger on September 30, 2008, became effective January 1, 2009. This law requires the State's 18 MPOs to develop the SCS as part of their RTPs, through integrated land use and transportation planning, and demonstrate an ability to attain the GHG emissions-reduction targets that CARB established for the region by 2020 and 2035. This would be accomplished through either the financially constrained SCS, as part of the RTP, or an unconstrained alternative planning strategy. If regions develop integrated land use, housing, and transportation plans that meet the SB 375 targets, new projects in these regions can be relieved of certain CEQA review requirements.

Executive Order B-30-15

Governor Jerry Brown signed EO B-30-15 on April 29, 2015. EO B-30-15 established a medium-term goal for 2030 of reducing GHG emissions by 40 percent below 1990 levels and requires CARB to update its current AB 32 Scoping Plan to identify measures to meet the 2030 target. EO B-30-15 supports EO S-3-05, but is only binding on State agencies.

Senate Bill 32 and Assembly Bill 197

SB 32 (2016) requires CARB to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 level by 2030, consistent with the target set forth in EO B-30-15. AB 197, the companion bill to SB 32, creates requirements to form a Joint Legislative Committee on

Climate Change Policies, requires CARB to prioritize direct emission reductions and consider social costs when adopting regulations to reduce GHG emissions beyond the 2020 statewide limit, requires CARB to prepare reports on sources of GHGs and other pollutants, establishes six-year terms for voting members of CARB, and adds two legislators as nonvoting members of CARB. CARB adopted the *2017 Climate Change Scoping Plan* in November 2017 to meet the GHG reduction requirement set forth in SB 32. The 2017 Scoping Plan proposes continuing the major programs of the previous Scoping Plan, including cap-and-trade regulations, the LCFS, more efficient cars, trucks, and freight movement, and a renewables portfolio standard, as well as reducing methane emissions from agricultural and other wastes.

Senate Bill 32 – Climate Change Scoping Plan

In December 2017, CARB approved the *2017 Climate Change Scoping Plan Update*, which builds on the programs set in place as part of the previous Scoping Plan drafted to meet the 2020 reduction targets per AB 32. The *2017 Climate Change Scoping Plan Update* proposes meeting the 2030 goal by accelerating the focus on zero and near-zero technologies for moving freight, continued investment in renewables, greater use of low-carbon fuels—including electricity and hydrogen—stronger efforts to reduce emissions of short-lived climate pollutants (i.e., methane, black carbon, and fluorinated gases), further efforts to create walkable communities with expanded mass transit and other alternatives to traveling by car, continuing the cap-and-trade program, and ensuring that natural lands become carbon sinks[3] to provide additional emissions reductions and flexibility in meeting the target. The *2017 Climate Change Scoping Plan Update* also recommends that local governments aim to achieve community-wide efficiency of 6 metric tons of CO_2e per capita by 2030 and 2 metric tons of CO_2e per capita by 2050 to be used in local climate action planning. These efficiency targets would replace the "15 percent from 2008 levels by 2020" approach recommended in the initial Scoping Plan, which would allow for local governments to grow in a sustainable manner (CARB 2016).

Mobile Source Strategy

In May 2016, CARB developed the Mobile Source Strategy to provide an integrated action plan that establishes an integrated planning perspective and common vision for transforming the mobile sector. The Mobile Source Strategy supports multiple planning efforts, including the SIPs, the Scoping Plan, the Short-Lived Climate Pollutant Reduction Strategy (discussed below), and the Sustainable Freight Action Plan. The Mobile Source Strategy outlines CARB's approach to reducing emissions from mobile sources. The strategy includes actions to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth.

Executive Order B-55-18

Signed by Governor Jerry Brown on September 10, 2018, EO B-55-18 acknowledges the environmental, community, and public health risks posed by future climate change. It further recognizes the climate stabilization goal adopted by 194 states and the European Union under the

[3] A *carbon sink* is a natural or artificial resource that absorbs and stores the atmosphere's carbon.

Paris Agreement. Although the United States currently is not party to the agreement, California is committed to meeting Paris Agreement goals and exceeding them wherever possible. Based on the worldwide scientific agreement that carbon neutrality must be achieved by midcentury, EO B-55-18 establishes a new State goal to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net negative emissions thereafter. The EO charges CARB with developing a framework for implementing and tracking progress toward these goals. This EO extends EO S-3-05, but is only binding on State agencies. However, given this directive, it is likely that the carbon-neutral goal by 2045 would make its way into future revisions to the Scoping Plan, which must be updated every 5 years.

Assembly Bill 1279

AB 1279 (Health and Safety Code Section 38562.2) codified the State's 2045 GHG emissions target expressed under EO B-55-18. The bill required California to achieve net-zero GHG emissions (i.e., reach a balance between the GHGs emitted and removed from the atmosphere) no later than 2045 and to achieve and maintain net-negative GHG emissions from then on. It also mandated an 85-percent reduction in statewide anthropogenic (i.e., human-made) GHG emissions (from 1990 levels) by 2045. AB 1279 recognized that meeting these targets would require direct GHG-emission reductions and removal of CO_2 from the atmosphere, as well as a nearly complete transition from fossil fuels. As such, the bill directed CARB to work with relevant State agencies to ensure that Scoping Plan updates include measures that put California on a trajectory to achieve these targets. It also tasked CARB with implementing strategies that facilitate CO_2-removal solutions and carbon capture, utilization, and storage technologies. To evaluate the State's progress, AB 1279 required that CARB report progress toward these targets annually to the California State Legislature. The bill directed that CARB, by 2035, must assess the feasibility and tradeoffs of reducing statewide anthropogenic GHG emissions to 85 percent below 1990 levels by 2045 and report its findings to the California State Legislature.

Pursuant to EO B-55-18 and AB 1279, CARB updated the 2017 Scoping Plan to address implementation of GHG-reduction strategies to meet the 2045 reduction target. The *2022 Scoping Plan for Achieving Carbon Neutrality*, approved in November 2022, built on GHG-reduction measures detailed in the previous Scoping Plans and included additional measures to capture and store atmospheric carbon through the State's natural and working lands, using a variety of mechanical approaches. By incorporating GHG-emissions reduction and carbon-capture methods, the 2022 Scoping Plan identified a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 (CARB 2022).

Vehicle Efficiency, Vehicle Miles Traveled, and Zero-Emissions/Low-Carbon Vehicle Standards

Executive Order S-01-07, Low Carbon Fuel Standard

California EO S-01-07 mandated: (1) that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020 (achieved); and (2) that an LCFS for transportation fuels be established in California. The EO initiated a research and regulatory process at CARB. In 2018, CARB passed amendments to the LCFS that set a target of reducing fuel-carbon intensity by 20 percent by 2030, compared to a 2010 baseline.

Assembly Bill 1493

With the passage of AB 1493, also known as Pavley I, in 2002, California launched an innovative and proactive approach to dealing with GHG emissions and climate change at the State level. AB 1493 required CARB to develop and implement regulations to reduce automobile and light-truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with model year 2009. Although litigation challenged these regulations and EPA initially denied California's related request for a waiver, the waiver request was granted. In 2012, additional strengthening of the Pavley I standards (referred to as the Advanced Clean Cars measure) was adopted for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 54.5 miles per gallon in 2025.

Advanced Clean Cars II

In August 2022, CARB voted to approve the Advanced Clean Cars II proposal, which would dramatically reduce emissions from passenger cars for model years 2026 through 2035. This goal requires an increasing proportion of new vehicles to be zero-emission vehicles, with the goal of 100 percent zero-emissions for new vehicles sold by 2035 (CARB 2022).

Advanced Clean Truck Regulation

CARB adopted the Advanced Clean Truck Regulation in October 2020 to accelerate a large-scale transition of zero-emission medium- and heavy-duty vehicles. The regulation requires the sale of zero-emission medium- and heavy-duty vehicles as an increasing percentage of total annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b–3 truck sales, 75 percent of Class 4–8 straight truck sales, and 40 percent of truck tractor sales. By 2045, every new medium- and heavy-duty truck sold in California will be zero-emission.

Senate Bill 375, Sustainable Communities Strategy

SB 375 (September 2008) provided a planning process that coordinated land use planning, RTPs, and funding priorities to help California meet the GHG-reduction goals established in AB 32. SB 375 required that RTPs developed by MPOs include an SCS.[4] The goal of the SCS is to reduce regional VMT through land use planning and consequent transportation patterns. CARB first released the regional targets in September 2010 and updated them in March 2018.

Regional

South Coast Air Quality Management District

As discussed in Section 2.3, *Air Quality*, SCAQMD has primary responsibility for development and implementation of rules and regulations to attain NAAQS and CAAQS, as well as permitting

[4] California Government Code Sections 14522.1, 14522.2, 65080, 65080, 65080.01, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, and 65588, and PRC Sections 2161.3, 21155, and 21159.28.

new or modified sources, developing air quality management plans, and adopting and enforcing air pollution regulations within the basin. CARB's Scoping Plans do not provide an explicit role for local air districts with respect to implementing the reduction goals of SB 32 and AB 32, but CARB does state that it would work actively with air districts in coordinating emissions reporting, encouraging, and coordinating GHG reductions and providing technical assistance in quantifying reductions. The ability of air districts to control emissions (both criteria pollutants and GHGs) is provided primarily through permitting, but also through their roles as CEQA leads or commenting agencies, the establishment of CEQA thresholds, and the development of analytical requirements for CEQA documents. Although SCAQMD has developed interim thresholds for industrial and other land use development projects, it has not developed thresholds for transportation projects.

Local

Riverside County Climate Action Plan

The County of Riverside adopted a Climate Action Plan (CAP) Update in November 2019, which set the goal for the County of Riverside to reduce GHG emissions to 40 percent below 1990 levels by the year 2030, to be consistent with the statewide goal identified in SB 32 (County of Riverside 2019). The CAP Update describes the County of Riverside's GHG emissions for the year 2017; projects how these emissions would increase into 2020, 2030, and 2050; and includes strategies to reduce emissions to a level consistent with the State of California's emissions reduction targets. The County of Riverside CAP Update has three primary purposes:

1. Present the County's Updated GHG inventory, forecasts, and target setting for achieving sustainability by utilizing resources effectively, reducing GHG emissions, and preparing for potential climate-related impacts.

2. Identify how the County would effectively implement this CAP Update to comply with the State and local GHG reduction policies by promoting economic competitiveness, obtaining funding for program implementation, and tracking and monitoring the progress of Plan implementation over time.

3. Allow streamlined CEQA compliance for new development by completing CEQA compliance for the CAP Update and developing screening tools that provide clear guidance to developers and other project proponents.

County of Riverside General Plan

The *County of Riverside General Plan*, Land Use Element, Circulation Element, and Air Quality Element (County of Riverside 2018, 2020, 2021), establish the following applicable policies:

Land Use Element

- **Policy LU 2.1(f):** Site development to capitalize upon multi-modal transportation opportunities and promote compatible land use arrangements that reduce reliance on the automobile.

- **Policy LU 3.1(d):** Create street and trail networks that directly connect local destinations, and that are friendly to pedestrians, equestrians, bicyclists, and others using non-motorized forms of transportation.
- **Policy LU 11.4:** Provide options to the automobile in communities, such as transit, bicycle and pedestrian trails, to help improve air quality.
- **Policy LU 13.4:** Incorporate safe and direct multi-modal linkages in the design and development of projects, as appropriate.

Circulation Element

- **Policy C 1.2:** Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary arterial highways, bikeways, park-n-ride facilities, and pedestrian facilities.
- **Policy C 1.5:** Evaluate the planned circulation system as needed to enhance the arterial highway network to respond to anticipated growth and mobility needs.
- **Policy C 1.7:** Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers.
- **Policy C 5.2:** Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping.
- **Policy C 20.14:** Encourage the use of alternative non- motorized transportation and the use of non-polluting vehicles.

Air Quality Element

- **Policy 14.1:** Monitor traffic and congestion to determine when and where the County needs new transportation facilities to achieve increased mobility efficiency.
- **Policy 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.
- **Policy AQ 20.3:** Reduce VMT and GHG emissions by improving circulation network efficiency.

2.8.2 Discussion of Environmental Evaluation Question 2.8 – Greenhouse Gas Emissions

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

No Impact.

Construction

Construction-period GHG emissions would be expected to result from material processing, onsite construction equipment use, and traffic delays due to construction. These emissions would

be generated at different levels throughout the construction period; their frequency of occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives and changes in materials, GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction-period emissions were estimated using the CalEEMod Linear Construction Module (version 2022.1.1.29), utilizing Project-specific parameters provided by the project design team. Approximately 1,948 metric tons of CO_2e are expected to be generated over the 18-month construction duration (see Appendix B). Due to the short-term duration of construction activities, impacts related to generation of GHGs would be less than significant.

Operation

The Project is a non-capacity-increasing project. Once reopened after construction, the proposed bridge will maintain the same number of lanes as the existing bridge. Therefore, the Project will not increase the volume of vehicles and will not increase operational emissions from vehicle traffic. Operation of the Project will also promote the flow of traffic. Therefore, the Project would not increase emissions of GHGs following the construction period. No operational impacts related to GHG emissions are anticipated to occur. Therefore, there would be no impact.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact.

There are no impacts related to the potential for the Project to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Construction activities to implement the Project would occur after the Riverside County CAP target date of 2020, and a number of the transportation-related policies are applicable to the Project. Many of the policies are statewide policies that would result in GHG reductions in Riverside County, such as the Pavley standards for passenger and light-duty vehicles, the LCFS, and tire pressure and low rolling-resistance tire measures. Among the local policies that would be implemented in the Project area and coincide with Project implementation are measure R2-T5, which involves roadway improvements, including signal synchronization and transportation flow management; and measure R2-T8, which enforces anti-idling policies. The Project would not preclude any of the State or local efforts to reduce GHG emissions; therefore, the Project would not conflict with the County's CAP. No impacts are anticipated.

2.8.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
IX. HAZARDS AND 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 2 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??	☐	☐	☒	☐

2.9.1 Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many State and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Resource Conservation and Recovery Act of 1976 (RCRA). The purpose of CERCLA, often referred to as *Superfund*, is to identify and clean up abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for cradle-to-grave regulation of hazardous waste generated by operating entities. Other federal laws include the following.

- Community Environmental Response Facilitation Act of 1992
- Clean Water Act
- Clean Air Act

- Safe Drinking Water Act
- Occupational Safety and Health Act
- Atomic Energy Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act

2.9.2 Discussion of Environmental Evaluation Question 2.9 – Hazards and Hazardous Materials

Initial Site Assessment

A Project-specific *Gilman Springs Road Bridge Replacement Project Initial Site Assessment* (ISA) was prepared for Caltrans by ICF in January 2024 (Caltrans 2024e). The purpose of the ISA was the identification of the potential impacts that hazardous substances might have during construction of the Project, in particular recognized environmental conditions (RECs). The report was prepared in general compliance with the CEQA and NEPA guidelines for evaluating potentially hazardous waste related impacts during construction at the site of the proposed Project. In addition, the American Society for Testing and Materials (ASTM) Standard E1527 was used as a basis of general procedures followed during preparation of the ISA. The ISA's findings and conclusions are used in support of the determinations made in this section.

Aerially Deposited Lead Data Report

An *Aerially Deposited Lead Data Report* (ADL Data Report) was prepared by Earth Mechanics, Inc. in August 2024 (Earth Mechanics 2024) for the Gilman Spring Road Phase 6 Safety Project, which included the Project site. The purpose of the ADL Data Report was to provide the findings and conclusions associated with an aerially deposited lead (ADL) investigation conducted as part of the Gilman Springs Phase 6 Safety Road Project. The ADL investigation consisted of:

1. A field exploration consisting of three exploratory borings (advanced along Gilman Springs Road).
2. Laboratory testing of soil samples. Samples were tested for total lead using EPA Method 6010B.
3. Evaluation of lead concentrations.

The ADL Data Report's findings and conclusions are applicable to the Project and are used in support of the determinations made in this section.

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

Less-than-Significant Impact.

Project construction would involve routine transport, use, and disposal of hazardous materials such as solvents, paints, oils, grease, and fuels. Such transport, use, and disposal must comply with applicable regulations. Although solvents, paints, oils, grease, and fuels would be transported, used, and disposed of during the construction phase, these materials are handled on a temporary basis and are typically used in construction projects; therefore, they would not represent the routine transport, use, and disposal of acutely hazardous materials. Any spills or releases involving these typical construction materials are expected to be small, localized, and cleaned as they occur. As part of standard construction practice, the construction contractor would incorporate standard construction BMPs for water quality protection. Therefore, Project construction would not create a significant hazard for the public or the environment through the routine transport, use, or disposal of hazardous materials during construction, and this impact would be less than significant.

The Project consists of a replacement of the bridge that carries Gilman Springs Road over Potrero Creek near the base of Massacre Canyon. As such, once constructed the Project is not expected to create a significant hazard to the surrounding environment as a result of routine transport, use, or disposal of hazardous materials. Solvents, paints, and other materials may be required during maintenance of the bridge; however, these materials would be used infrequently and are expected to be used in small quantities. No storage of materials or chemicals would occur, and the Project is not anticipated to increase the potential hazardous materials in the Project area. Impacts would be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less-than-Significant Impact.

As noted under threshold a), construction-related hazardous materials would be used during construction of the Project, including solvents, paints, oils, grease, and fuels. It is possible that any of these substances could be released during construction activities. However, compliance with federal, State, and local regulations along with standard construction BMPs would ensure that all hazardous materials are used, stored, and disposed of properly. This would minimize potential impacts related to a hazardous materials release during the construction phase of the Project.

As noted under Section 7.2, *Other Environmental Considerations,* of the ISA (Caltrans 2024e), there is a potential for exposure to the following hazardous materials during Project construction:

- Asbestos Containing Material (ACM) - Due to the bridge's construction date (1926), ACM could potentially be present in bridge elements.

- Lead Based Paint (LBP) – Historically, road striping is known to contain metals and other materials considered to be hazardous. LBP could also potentially be present on bridge elements.

- ADL – The ISA identified the potential for ADL to be present in unpaved areas within the Project limits (in particular, areas closest to Gilman Springs Road). An ADL investigation for the Project site was conducted for the Gilman Springs Phase 6 Safety Road Project, which included the Project site, in August 2024.

- Title 22 Metals – As mentioned, road striping is known to contain metals and other materials considered to be hazardous.

- Treated Wood Waste – Project implementation could produce treated wood waste if utility poles are removed or relocated.

- Polychlorinated Biphenyls (PCBs) – PCBs could be located in electrical infrastructure to be removed or relocated as part of the Project.

Implementation of measures **SM-HAZ-1** through **SM-HAZ-6** detailed below under Section 2.9.3, *Avoidance, Minimization, and Mitigation Measures*, would ensure avoidance of potential exposure or a release involving hazardous materials, including those identified in the ISA and listed in the bullets above. As mentioned previously, an ADL Data Report was prepared in August 2024 for the Gilman Springs Phase 6 Safety Road Project, which included the Project site, to identify the potential risk for exposure to ADL. According to the ADL Data Report, sampling results determined that soils being evaluated were "*Non-Designated*"[5], and can be used as fill material. No special requirements were determined to be necessary for onsite reuse and offsite disposal.

With compliance to federal, State, and local regulations, and implementation of the standard measures described (and included in the site-specific ISA), impacts associated with the potential upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact.

There are no schools within one-quarter mile of the Project alignment. The closest school is Clayton A Record Elementary located approximately 2.6 miles to the southeast, at 1600 Malaga Drive West in San Jacinto. Therefore, no impact would result from Project implementation.

[5] According to the Statewide Soil Management Agreement for Caltrans for Reuse of Aerially Deposited Lead-Contaminated Soils (2016).

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact.

According to the *Gilman Springs Road Bridge Replacement Project Initial Site Assessment,* the Project site was not identified in any environmental databases searched[6]. In addition, a supplemental search conducted in the California Environmental Protection Agency's Cortese List Data Resources (California Environmental Protection Agency 2024) during the preparation of this document did not identify the Project site on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, implementation of the Project would not create a significant hazard to the public or the environment as a result of being located on a Cortese List site. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact.

The Project site is not located within an airport land use plan or within two miles of a public airport or public use airport. The nearest airports are the Hemet-Ryan Airport, 6.8 miles to the south of the Project area and the Banning Municipal Airport, 9.5 miles to the northeast. No impact would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less-than-Significant Impact.

The proposed bridge replacement and roadway realignment would not change the capacity of Gilman Springs Road and would not include any permanent changes to existing public roadways that provide emergency access to the Project site or surrounding area. During construction, it is possible that construction activity could potentially affect emergency response or evacuation plans due to temporary construction barricades or other roadway obstructions that could impede emergency access on the site. However, compliance with City requirements regarding circulation and access during construction activities would minimize potential impacts associated with emergency response times access. In addition, a Traffic Control Plan (TCP) (**SM TRA-1**) would be implemented prior to construction, which is a standard Caltrans measure and would further ensure reduced or avoided impacts on emergency response times.

[6] Databases reviewed included information regarding federal and State lists of known or suspected contaminated sites, known handlers or generators of hazardous waste, known waste disposal facilities, and permitted underground storage tanks (USTs).

Once operational, the Project would address structural and hydraulic deficiencies of the existing bridge and would improve the operational characteristics and geometrics of the bridge and roadway approaches. Therefore, implementation of the Project would ultimately improve circulation in the Project area, thereby improving emergency response and evacuation along Gilman Springs Road and its surroundings. Thus, the Project would have no short-term or long-term effect on the ability of emergency service providers serving the surrounding area and would not interfere with an emergency response or evacuation plan. Impacts would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Less-than-Significant Impact.

The Project would replace an existing bridge and would not expose people to a greater risk of loss, injury, or death due to wildland fires than presently exists. According to the *County of Riverside General Plan* Safety Element's Figure 7: Fire Hazard Severity Zones (West County) And Emergency Service Facilities, the Project site is partially within and adjacent to a Very High Fire Hazard Severity Zone (FHSZ) under State responsibility and is partially within a FHSZ under local responsibility (County of Riverside 2021). However, construction activities would be limited to the existing right of way and areas immediately surrounding the Project site and are not anticipated to introduce new risks related to wildland fires (more than existing conditions). In addition, the Project does not feature habitable structures that could expose people to long-term risks associated with wildland fires. Impacts would be less than significant.

2.9.3 Avoidance, Minimization, and Mitigation Measures

The following measures, included in the ISA and required to be implemented in accordance with Caltrans' specifications, would be applied to avoid and/or minimize impacts associated with the potential exposure to hazardous materials prior to and during Project construction.

AMM-HAZ-1: ACM and LBP Surveys

Prior to construction, ACM and LBP surveys will be conducted by a qualified contractor to determine the presence of these materials. If discovered on site, abatement will be conducted in accordance with South Coast Air Quality Management District Rule 1403 and any other applicable laws prior to demolition. In addition, if underground utilities, pipelines, or associated pieces of subsurface infrastructure are accidentally disturbed during construction, the exposed feature will be surveyed for asbestos content prior to being handled. Surveying and abatement of the material (if discovered) will also be conducted by a certified specialist in accordance with all applicable laws.

AMM-HAZ-2: Visual and Olfactory Monitoring During Construction

In the event an undocumented contaminant is discovered during construction, and although contaminated soil is not likely to be present on the Project site (due to the environmental status of onsite and offsite hazardous materials sites presented in the

Project-specific ISA), the contractor will observe exposed soil for visual and olfactory evidence of contamination as well as the possible presence of unknown hazardous material sources, such as buried containers, underground tanks, and/or associated piping, during excavation activities. If visual or olfactory contamination indicators or unknown hazardous material sources are observed during excavation or grading activities, all work will stop, and an SI be designed and performed to verify the presence and extent of contamination and/or potential hazards at the site. A qualified and approved environmental consultant will perform the SI. Results will be reviewed and approved by the applicable local and State agencies prior to construction. The SI will include sample collection for laboratory analysis and quantifying contaminant levels within the proposed excavation and disturbance areas. The SI will determine appropriate worker protection and hazardous material handling and disposal procedures for the Project site.

AMM-HAZ-3: Onsite Personnel Training Requirements and Health and Safety Plan Implementation

If soil determined to be hazardous waste would result in impacts on the Project, such soil will be excavated by personnel who have been trained through the Occupational Safety and Health Administration's recommended 40-hour safety program (29 Code of Federal Regulations 1910.120), with an approved plan for excavation, control of contaminant releases to the air, and offsite transport or onsite treatment. Health and safety plans prepared by a certified industrial hygienist will be developed to protect the public and all workers in the construction area. Health and safety plans will be reviewed and approved by the appropriate local and State agencies.

AMM-HAZ-4: Proper Handling of Yellow or White Paint or Thermoplastic Traffic Stripes

Should construction activities result in the removal of yellow or white paint or thermoplastic traffic stripes, the age of the traffic striping will be determined. If appropriate, the material will be sampled prior to removal, and if lead and/or chromium is present in the materials at or above the hazardous waste levels, it will be disposed of at a permitted disposal facility. In addition, a Project-specific LCP will be required to prevent or minimize worker exposure to lead while handling materials containing lead, per Title 8, California Code of Regulations, Section 1532.1, Lead.

AMM-HAZ-5: Proper Handling of Treated Wood Waste

If encountered on the Project site and planned to be removed or reused, power poles, wood planks, wood electric utility poles, or guardrail posts (including previously salvaged posts) in the Project right of way should be tested to identify the presence and nature of treatment. These materials should be managed or disposed of as treated wood waste under the Alternative Management Standards, in accordance with DTSC guidance for the management of treated wood waste.

AMM-HAZ-6: PCB Soil Impacts

During final design but prior to construction, if pole-mounted transformers are found within Project work areas, they should be inspected for leaks. Leaking transformers should be considered a potential PCB hazard, and potentially affected soils should be tested prior to excavation. Soil handling, transport, and disposal should be pursuant to applicable regulations and the results of soil testing.

2.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on or off site;	☐	☐	☒	☐
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	☐	☐	☒	☐
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
(iv) impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

2.10.1 Regulatory Setting

Federal

Clean Water Act

In 1972, Congress amended the Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source[7] unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

[7] A *point source* is any discrete conveyance such as a pipe or a man-made ditch.

- **Sections 303 and 304**, which require states to promulgate water quality standards, criteria, and guidelines.

- **Section 401**, which requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the United States to obtain certification from the State that the discharge will comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request [see below].)

- **Section 402**, which establishes NPDES, a permitting system for the discharge of any pollutant (except dredged or fill material) into waters of the United States. RWQCBs administer this permitting program in California. Section 402(p) requires permits for discharges of stormwater from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s).

- **Section 404**, which establishes a permit program for the discharge of dredged or fill material into waters of the United States. USACE administers this permit program.

National Flood Insurance Program

In response to increasing costs of disaster relief, Congress passed the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. The intent of these acts was to reduce the need for large, publicly funded, flood-control structures and disaster relief by restricting development on floodplains. The National Flood Insurance Program (NFIP) was created as a result of the passage of the National Flood Insurance Act of 1968. The Federal Emergency Management Agency (FEMA) administers the NFIP to provide subsidized flood insurance to communities that comply with FEMA regulations by limiting development in floodplains. FEMA issues Flood Insurance Rate Maps (FIRM) for communities participating in the NFIP. These maps delineate flood hazard zones in the community. A FIRM is the official map of a community prepared by FEMA to delineate both the special flood hazard areas (SFHA) and the flood risk premium zones applicable to the community.

State

Porter–Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 (Porter-Cologne Act) is the basic water quality control law for California. The Porter-Cologne Act authorizes the State to implement the provisions of the CWA and establishes a regulatory program to protect the water quality of the State and the beneficial uses of State waters. The act requires project proponents whose projects would result in discharging, or proposing to discharge, wastes that could affect the quality of the State's water to file a Report of Waste Discharge with the appropriate Regional Water Board. The Porter-Cologne Act also requires that SWRCB or a Regional Water Board adopt basin plans for the protection of water quality. Basin plans are updated and reviewed every 3 years and provide the technical basis for determining Waste Discharge Requirements (WDRs), taking enforcement actions, and evaluating clean water grant proposals.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, issues water board orders on matters of statewide application, and oversees water quality functions throughout the State by approving Basin Plans, TMDLs, and NPDES permits. SWRCBs identify waters failing to meet standards for specific pollutants, which are then State-listed in accordance with CWA Section 303(d). If it is determined that waters of the State are impaired for one or more constituents and the standards cannot be met through point-source or nonpoint-source controls (e.g., NPDES permits or WDRs), the CWA requires the establishment of TMDLs.

RWCQBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction, using planning, permitting, and enforcement authorities to meet this responsibility. The water quality objectives developed for particular water segments are based on the designated use and vary depending on such use. The Santa Ana Basin Plan specifies region-wide and water body–specific beneficial uses and has set numeric and narrative water quality objectives for several substances and parameters in numerous surface waters in the project region.

National Pollutant Discharge Elimination System Program

Section 402(p) of the CWA requires issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The U.S. Environmental Protection Agency defines an MS4 as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, or county, or other public body having jurisdiction over stormwater, that are designed or used for collecting or conveying stormwater." The SWRCB or the RWQCB issues NPDES permits for five years. Permit requirements remain active until a new permit has been adopted. The current applicable NPDES permit, the County of Riverside MS4 permit, is described below.

Municipal Separate Storm Sewer Systems

CWA Section 402 mandates permits for municipal stormwater discharges, which are regulated under the NPDES General Permit for Municipal Separate Storm Sewer Systems (MS4) (MS4 Permit). Phase I MS4 regulations cover municipalities with populations greater than 100,000, certain industrial processes, or construction activities disturbing an area of 5 acres or more. Phase II (Small MS4) regulations require that stormwater management plans be developed by municipalities with populations smaller than 100,000.

The Santa Ana RWQCB regulates pollution from urban areas through three separate MS4 permits issued to three counties (i.e., Orange, Riverside, San Bernardino). These permits were first issued in the 1990s but have been renewed four times since then. The current MS4 permit, Order No. R9-2013-0001, NPDES No. CAS010266, as amended by Order No. R9-2015-0100 and Order No. R9-2015-0001, regulates stormwater and non-stormwater discharges within Riverside County. The Santa Ana RWQCB is proposing a single MS4 permit for all counties and cities in the Santa Ana River watershed.

NPDES stormwater permits require that controls are implemented to reduce pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate. As part of permit compliance, these permit holders have created stormwater management plans for their respective locations. These plans outline the requirements for municipal operations, industrial and commercial businesses, construction sites, and planning and land development. These requirements may include multiple measures to control pollutants in stormwater discharge. During implementation of specific projects under the program, project applicants will be required to follow the guidance contained in the stormwater management plans as defined by the permit holder in that location.

Construction General Permit

Most construction activities that disturb 1 acre of land or more are required to obtain coverage under the NPDES General Permit for Construction Activities (Construction General Permit). The State Water Board has issued a statewide Construction General Permit (Order No. 2022-0057-DWQ, NPDES No. CAS000002), adopted September 8, 2022. Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, that result in soil disturbances of at least 1 acre of total land area. The Construction General Permit requires the applicant to file a notice of intent (NOI) to discharge stormwater and to prepare and implement a stormwater pollution prevention plan (SWPPP). The SWPPP includes a site map and a description of proposed construction activities, along with a demonstration of compliance with relevant local ordinances and regulations, and an overview of the BMPs that would be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby water resources. Permittees are further required to conduct annual monitoring and reporting to ensure that BMPs are correctly implemented and effective in controlling the discharge of stormwater-related pollutants. Because the disturbed soil area for the Project is 40,200 square feet (0.92 acre), compliance with the CGP and implementation of a SWPPP is not required.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act of 2014 (SGMA) is a comprehensive three-bill package that Governor Jerry Brown signed into State law in September 2014. The SGMA provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for State intervention only if necessary, to protect the resource. The plan is intended to ensure a reliable groundwater water supply for California for years to come. SGMA requires the formation of local Groundwater Sustainability Agencies (GSA), which are required to adopt groundwater sustainability plans (GSPs) to manage the sustainability of groundwater basins. GSAs for all high- and medium-priority basins, as identified by the Department of Water Resources (DWR), must adopt a GSP, or submit an alternative to a GSP. SGMA also 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. GSPs for high- and medium-priority basins are due to DWR by January 31, 2022, however GSPs for critically over drafted high- and medium-priority basins were due to DWR by January 31, 2020. The Project overlies the San Jacinto Basin is considered a high-priority basin, which is designated as a high-priority

basin. The Eastern Municipal Water District developed a GSP for the San Jacinto Groundwater Basin, in compliance with SGMA requirements, which was approved in 2023.

2.10.2 Discussion of Environmental Evaluation Question 2.10 – Hydrology and Water Quality

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less-than-Significant Impact.

Construction activities have the potential to result in runoff that contains sediment and other pollutants, which could degrade water quality if not properly controlled. Sources of pollution associated with construction include chemical substances from construction materials and hazardous or toxic materials, such as fuels. As described in Impact 2.9(b), the Project would be subject to State and federal hazardous materials laws and regulations, which would minimize the risk of affecting the quality of surface water and groundwater. Because the DSA is less than one acre, compliance with the CGP and implementation of a SWPPP is not required. However, a water pollution control plan would be implemented to prevent water pollution during construction.

The County and the construction contractor would comply with all applicable construction site BMPs specified in the water pollution control plan, as well as any other permit conditions, to minimize an introduction of construction-related contaminants and the mobilization of sediment in Potrero Creek, drainages, and ditches in and adjacent to the Project area. Broadly, these BMPs would address soil stabilization, sediment control, wind erosion control, vehicle tracking control, non-stormwater management, and waste management practices. The BMPs would be selected to achieve maximum sediment removal and represent the best available technology that is economically achievable, subject to review and approval by the County.

Construction of the Project would involve ground-disturbing activities such as excavation. If groundwater is encountered during construction, dewatering may be required. However, dewatering would occur on a temporary, short-term basis during the construction period. Groundwater sampling and/or treatment may be required to ensure compliance with applicable construction dewatering discharge permitting. In the unlikely event that contaminated groundwater is encountered, compliance with discharge sampling, monitoring, and reporting requirements are required. If it is found that the groundwater does not meet water quality standards, it must either be treated prior to discharge so that all applicable water quality objectives (as designated in the Basin Plan) are met or hauled off site for treatment and disposal at an appropriate waste treatment facility that is permitted to receive such water. Groundwater from dewatering would be disposed of if it cannot be discharged within the Project limits due to site constraints or contamination per Section 13-4.03G, Dewatering, of Caltrans' latest Standard Specifications. When pollutants are expected from dewatering activities, special provisions for the Project would be included. These would prohibit the use of discharged groundwater in other construction-related activities, including dust control, to prevent the discharge from entering the Project site or surface water. Therefore, groundwater quality impacts during construction would be less than significant.

Stormwater runoff from the transportation uses that would be facilitated by Project are regulated under the MS4 permit. The Project would comply with the appropriate MS4 permit and implement BMPs as required. Implementation of BMPs would reduce adverse water quality impacts and control stormwater runoff and associated pollutants. Design pollution prevention (DPP) BMPs may include slope/surface protection systems (permanent soil stabilization); concentrated flow conveyance systems; overside drains; flared-end sections; and outlet protection/velocity dissipation devices. The road alignment includes superelevated horizontal curves which may affect the ability to collect and treat surface runoff at appropriate locations. However, slopes and channels would be protected to provide source control. During operation, there is potential for slightly increased sediment loading due to the increase in total impervious areas, vehicular traffic, and runoff. The Project would comply with County of Riverside MS4 permits and implement BMPs as required. No selections for DPP and temporary BMPs have been made, but BMPs would be implemented to reduce the discharge of pollutants to the stormwater system to the maximum extent practicable, as required by the Santa Ana Region MS4 Permit. The types of measures incorporated may include minimizing street sweeping, inspecting and maintaining drainage facilities, and protecting slopes and channels. The County review and permitting process will ensure that the permit's waste discharge requirements are not violated by the Project. For these reasons, the Project would not violate water quality standards or waste discharge requirements during operation, including standards and requirements regarding surface water and groundwater quality. Operational impacts would be less than significant.

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

No Impact.

The Project would result in an increase in impervious surface, which could lower the potential for groundwater recharge within the localized groundwater aquifer system. The GSP for the San Jacinto Basin delineates areas where hydraulic conductivity is conducive to groundwater recharge. The Project site is not within an area of potential recharge, and soils have slow infiltration rates. The Project may require in-water work and therefore could require dewatering or water diversion. However, with implementation of Project features and standardized measures, the Project would not adversely affect existing conditions associated with the groundwater table or have an adverse effect on aquifer recharge. If groundwater is encountered during construction, dewatering may be required. Dewatering would occur on a temporary, short-term basis during the construction period. In addition, construction activities would use commercially available water; groundwater sources would not be used for construction or operation of the Project. Therefore, the Project would not substantially decrease groundwater supplies or interfere with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Therefore, no impact would occur.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on or off site?

Less-than-Significant Impact.

The Project would replace the existing bridge over Potrero Creek. Construction may require in-water work and therefore could require dewatering or water diversion. However, water diversions would occur on a temporary, short-term basis during the construction period only. Following Project construction, the course of Potrero Creek would be similar to existing conditions and would not be altered by the Project.

During construction, stormwater drainage patterns could be temporarily altered due to site grading, preparation, and excavation activity. However, the County and the construction contractor would comply with all applicable construction site BMPs specified in the water pollution control plan, as well as any other permit conditions, to minimize the mobilization of sediment in Potrero Creek, drainages, and ditches in and adjacent to the Project area. Broadly, these BMPs would address soil and swale stabilization, sediment control, wind erosion control, vehicle tracking control, non-stormwater management, and waste management practices. The Project would minimize erosion by disturbing slopes only when necessary and minimizing cut-and-fill areas to reduce slope lengths. Demolition of the existing bridge over Potrero Creek would be expected to occur during the dry season when the water would not be present in the creek. The potential for erosion and sedimentation would be managed with the use of effective construction and engineering BMPs. These practices would include stabilizing the soil surface, reducing the erosive energy of surface flows, filtering runoff, and capturing sediment-laden water. Implementation of the performance standards of Caltrans and County grading, erosion, and sediment control ordinances would minimize the potential for construction-related surface water pollution and ensure that water quality in Potrero Creek would not be compromised by erosion and sedimentation during construction. In addition, construction BMPs would manage runoff, ensuring that drainage patterns are not significantly altered.

During operation, the Project would incorporate permanent erosion control elements, such as revegetation, to ensure that stormwater runoff would not cause soil erosion. Implementation of the Project-specific long-term avoidance and minimization measures, as well as design BMPs, would also reduce or avoid impacts on water quality. Long-term effects on turbidity would be addressed through final stabilization of soils, which could involve hydroseeding, soil binders, velocity dissipation devices, and preservation of existing vegetation. Further, drainage patterns would be maintained. The bridge would be designed to convey stormwater toward the roadway. Drains are anticipated prior to and after the bridge, but not on the bridge itself. Design features and BMPs may include minimizing road widths, minimizing street sweeping, inspecting and maintaining drainage facilities, and protecting slopes and channels. Implementation of design features and BMPs would ensure the Project complies with County of Riverside and Santa Ana Region MS4 permit stormwater requirements. Therefore, the Project would not result in substantial erosion or siltation on site or off site. Therefore, this impact would be less than significant.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

Less-than-Significant Impact.

Including the bridge, the Project is expected to result in a net increase of 2,230 square feet of impervious surface area. Excluding the bridge, the Project is expected to result in a net increase of 520 square feet of impervious surface area on land. The Project would result in an overall increase in impervious area, which would increase the volume of runoff during rain events. However, the watershed draining to the Project site is 36.3 square miles in area (Avila and Associates Consulting Engineers, Inc. 2024). When compared against the watershed area, the additional 2,230 square feet of impervious area associated with the Project represents less than 0.001% increase in the watershed area contributing runoff. As it does in the existing condition, stormwater runoff with the Project would continue to drain off the roadway and infiltrate into the unpaved shoulders. The proposed bridge design, with its widened channel, superelevated roadway, and proposed bridge geometry, would improve hydraulics by promoting better conveyance through the channel (Avila and Associates Consulting Engineers, Inc. 2024). Therefore, changes to drainage patterns due to the Project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on site or off site. The Project would comply with County of Riverside and Santa Ana Region MS4 permits and would implement BMPs as required to reduce the rate and volume of stormwater runoff. Therefore, this impact would be less than significant.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact.

The Project would result in an overall increase in impervious surface area, which would increase the volume of surface runoff during rain events. The road alignment includes superelevated horizontal curves which may affect the ability to collect and treat surface runoff at appropriate locations. However, slopes and channels would be protected to provide source control. In addition, the Project would comply with County of Riverside MS4 permits and implement BMPs as required. BMPs would be implemented to reduce the discharge of pollutants to the stormwater system to the maximum extent practicable, as required by the Santa Ana Region MS4 Permit. BMPs may include minimizing street sweeping, inspecting and maintaining drainage facilities, and protecting slopes and channels. The replacement bridge is anticipated to be longer (approximately 75 to 90 feet long) compared to existing conditions to provide adequate hydraulic conveyance for Potrero Creek flows. Compliance with the CGP and implementation of a SWPPP is not required because the disturbed soil area is less than one acre. However, a water pollution control plan would be implemented to prevent additional sources of polluted runoff during construction. The Project would comply with State and local regulations, as well as implement BMPs. Therefore, no impacts would occur related to surface runoff, including capacity of the drainage system or additional sources of polluted runoff.

iv) Impede or redirect flood flows?

No Impact.

The Project site is predominantly within FEMA Zone X, an area with a minimal flood hazard. Zone X is usually depicted on FIRMs as being above the 100-year flood level. However, temporary impacts associated with construction of the proposed bridge is within FEMA-designated Zone A, an area subject to inundation from a flood with a 1 percent annual chance (100-year flood) but no depths or base flood elevations have not been determined (FEMA 2008). The Project would replace the aging bridge over Potrero Creek and would be designed to provide adequate hydraulic conveyance for Potrero Creek flows. There would be no structures which would impede or redirect flow. Design pollution prevention BMPs would be implemented which would also manage flows. These may include slope/surface protection systems (permanent soil stabilization); concentrated flow conveyance systems; overside drains; flared-end sections; and outlet protection/velocity dissipation devices. Therefore, the Project would not impede or redirect flood flows, and there would be no impacts.

d) Would the project risk release of pollutants to project inundation in flood hazard, tsunami, or seiche zones?

No Impact.

The Project site is approximately 46 miles northeast of the Pacific Ocean and not within a tsunami inundation zone and, therefore, not subject to inundation from tsunami. Seiches occur in an enclosed or partially enclosed body of water, such as a lake or reservoir. There are no large bodies of fresh water, such as reservoirs or lakes, within the Project vicinity, therefore, there is no risk of seiche that would affect the Project site, and the Project site is not subject to flooding from a seiche. Conditions under the Project would be similar to existing conditions and would not increase the potential for site inundation.

The Project site is predominantly within FEMA Zone X, an area with a minimal flood hazard and above the 100-year flood level. Temporary impacts associated with construction of the proposed bridge is within FEMA-designated Zone A, an area subject to inundation from a flood with a 1 percent annual chance (100-year flood) but no depths or base flood elevations have not been determined (FEMA 2008). In the event of a flood hazard during construction, the Project would comply with the requirements of the Construction General Permit and local water quality programs and associated municipal stormwater NPDES MS4 permits to manage flood risks and reduce the risk of pollutant release. Conformance to these requirements would ensure that any risk of release of pollutants due to Project inundation in a flood hazard would be minimized. Prior to a potential flood hazard, construction equipment and hazardous materials such as gasoline or diesel used during construction would be moved outside of the inundation area. The Project would not release pollutants due to Project inundation by flood hazard, tsunami, or seiche. Therefore, no impact would occur.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact.

Project implementation would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The Project would result in a net increase of impervious surface area on land, which could result in an increased volume of pollutants leaving the Project site. However, the Project would implement BMPs to reduce the discharge of pollutants to the maximum extent practicable, as required by the County of Riverside and Santa Ana Region MS4 Permits. BMPs may include inspecting and maintaining drainage facilities and protecting slopes and channels. Implementation of BMP's would ensure that the Project complies with the appropriate water quality objectives for the region, as defined in the Water Quality Control Plan for the Santa Ana Basin (Basin Plan). As part of compliance with permit requirements during ground-disturbing or construction activities, implementation of water quality control measures and BMPs would ensure that water quality standards would be achieved, including water quality objectives that protect designated beneficial uses of surface water and groundwater, as defined in Basin Plan.

The NPDES Construction General Permit requires stormwater discharges not to contain pollutants that cause or contribute to an exceedance of any applicable water quality objectives or water quality standards, including designated beneficial uses. In addition, groundwater resources in the Project area are managed under the GSP for the San Jacinto Groundwater Basin. If groundwater is encountered during construction, dewatering may be required. However, dewatering would occur on a temporary, short-term basis during the construction period and would not alter groundwater supply. The Project would not conflict with the GSP's goal of ensuring a sustainable, high-quality, reliable water supply. Thus, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, no impact would occur.

2.10.3 Avoidance, Minimization, and Mitigation Measures

The following standard measures would be implemented to avoid or minimize potential impacts.

SM WQ-1: Construction BMPs

Construction site BMPs, as well as any other applicable permit conditions, would be specified in the water pollution control plan to minimize any introduction of construction-related contaminants or the mobilization of sediment into drainages in or adjacent to the Project area.

2.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

2.11.1 Regulatory Setting

Federal and State

No federal or State regulations apply to this resource.

Regional and Local

County of Riverside

County of Riverside General Plan

Land Use Element

Commercial land uses are critical to the long term economic and fiscal stability of the County of Riverside. Commercial uses help to provide jobs for local residents, contribute to enhancing and balancing communities economically, and facilitate a tax base that aids in providing needed public facilities and services. The Commercial Regional (CR) land use designation allows for the development of commercial retail uses at a neighborhood, community, and regional level, as well as for professional office and tourist-oriented commercial uses. It is the goal of the general plan to accommodate commercial demand, stimulate focused commercial centers, accommodate a variety and range of uses, and ensure that new or rehabilitated commercial structures and centers enhance the character of the area and are integrated into the community they are intended to service. The *County of Riverside General Plan*, Land Use Element (County of Riverside 2021a), contains the following policies relevant to land use.

- **LU 1.5:** The County of Riverside shall participate in regional efforts to address issues of mobility, transportation, traffic congestion, economic development, air and water quality, watershed and habitat management with cities, local and regional agencies, stakeholders, Indian nations, and surrounding jurisdictions. (AI 4, 16)
- **LU 13.6:** Require that adequate and accessible circulation facilities exist to meet the demands of a proposed land use. (AI 3)

- **LU 28.6:** Require setbacks and other design elements to buffer residential units to the extent possible from the impacts of abutting agricultural, roadway, commercial, and industrial uses. (AI 3)
- **LU 32.9:** Integrate pedestrian, equestrian and bicycle-friendly street and trail networks connecting community centers with surrounding land uses. (AI 3)

San Jacinto Valley Area Plan

The SJVAP (County of Riverside 2021b) focuses on preserving the unique features in the San Jacinto Valley area and, at the same time, guides the accommodation of future growth. The SJVAP is organized around 24 Area Plan land use designations. These land uses derive from, and provide more detailed direction than, the five General Plan Foundation Component land uses: Open Space, Agriculture, Rural, Rural Community, and Community Development. The SJVAP contains the following policies relevant to the Project and land use:

- **SJVAP 3.6:** Require the placement and design of roadways to be compatible with the natural character of the River corridor.

2.11.2 Discussion of Environmental Evaluation Question 2.11 – Land Use and Planning

a) Would the project physically divide an established community?

No Impact.

The Project is located on Gilman Springs Road, approximately 0.5 mile southeast of the State Route (SR) 79/Gilman Springs Road Interchange. The Project LOD consists of land use designated as mixed-use policy area (MUA) and rural mountainous (RM) and is zoned as W-2 for controlled development areas (refer to Figure 2.11-1 and Figure 2.11-2) (County of Riverside 2023). Land uses surrounding the Project consist of undeveloped land uses. No businesses, residences, or other buildings are located directly adjacent to the Project.

Construction would result in temporary effects by causing a temporary increase in traffic and congestion during construction in the Project area. Temporary effects would not result in long-term changes to regional population characteristics. The Project would result in minor changes in land use, would have a minor influence on economic vitality, and is not anticipated to encourage increased population density or construction of additional housing. Construction of the new bridge is anticipated to be completed in two stages while maintaining traffic on Gilman Springs Road. However, a full roadway closure may be necessary during construction. This would be determined once traffic analysis results are available. Implementation of a TCP (**SM TR-1**) will reduce or avoid potential traffic impacts during construction, avoiding changes to community character and cohesion.

Operation of the Project would have minimal effects on community cohesion. The proposed bridge replacement would not introduce a barrier that would divide any existing communities, separate residences from community facilities, result in substantial growth, or impede connectivity between neighborhoods. Gilman Springs Road is an existing roadway and the

Project is being designed to utilize the existing ROW. The Project would not physically divide an established community. Therefore, there would be no impact.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact.

The *County of Riverside General Plan*, Land Use Element, and the SJVAP (County of Riverside 2021a, 2021b) include policies that support circulation system improvements as detailed above. The Project is consistent with these plans and would help to fulfill the aforementioned goals, policies, and objectives.

The replacement of the existing Gilman Springs Bridge is consistent with the road's designation as a Secondary Highway in the *County of Riverside General Plan*, Circulation Plan. The Project would maintain the current two undivided lanes configuration, with one lane in each direction. The Project is designed to utilize the existing roadway right of way to the extent possible; however, the bridge and the roadway approaches on each end of the bridge would be relocated slightly to the south. These minor changes to the roadway alignment would improve sight distance and permit an increase in the speed limit and, hence, improve traffic flow.

Along with improving traffic flow and improving safety, the Project would improve the Sufficiency Rating of Gilman Springs Bridge, thereby removing the bridge from the HBP Eligible Bridge List and improving the County's infrastructure report card. The Project is consistent with the goals and policies of the County of Riverside's planning documents. Therefore, there would be no impact.

2.11.3 Avoidance, Minimization, and Mitigation Measures

SM TR-1: Traffic Control Plan, detailed in Section 2.17, *Transportation*, will be implemented to avoid or minimize traffic impacts. No additional measures are required.

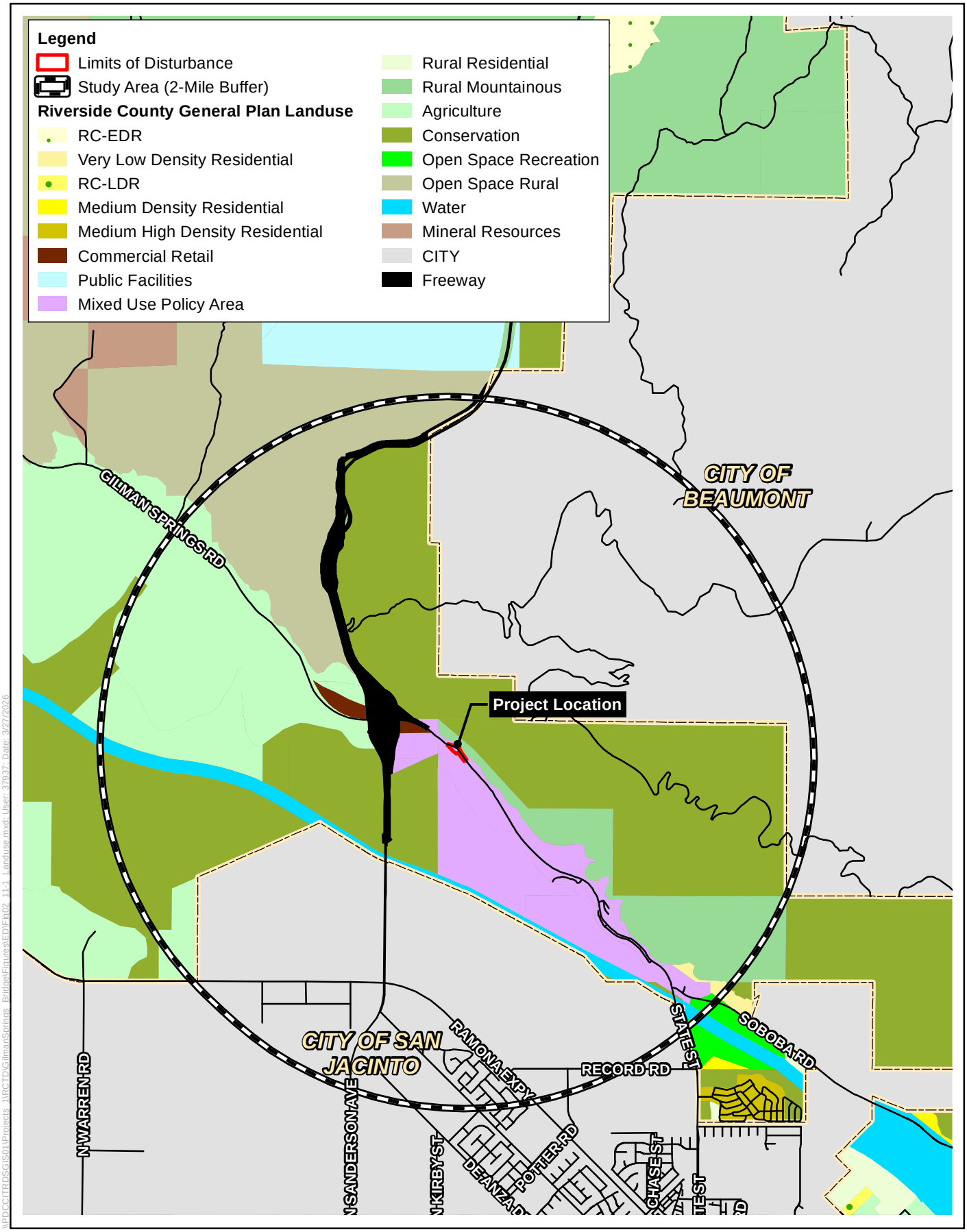


Figure 2.11-1
Land Use
Gilman Springs Road Bridge Replacement Project

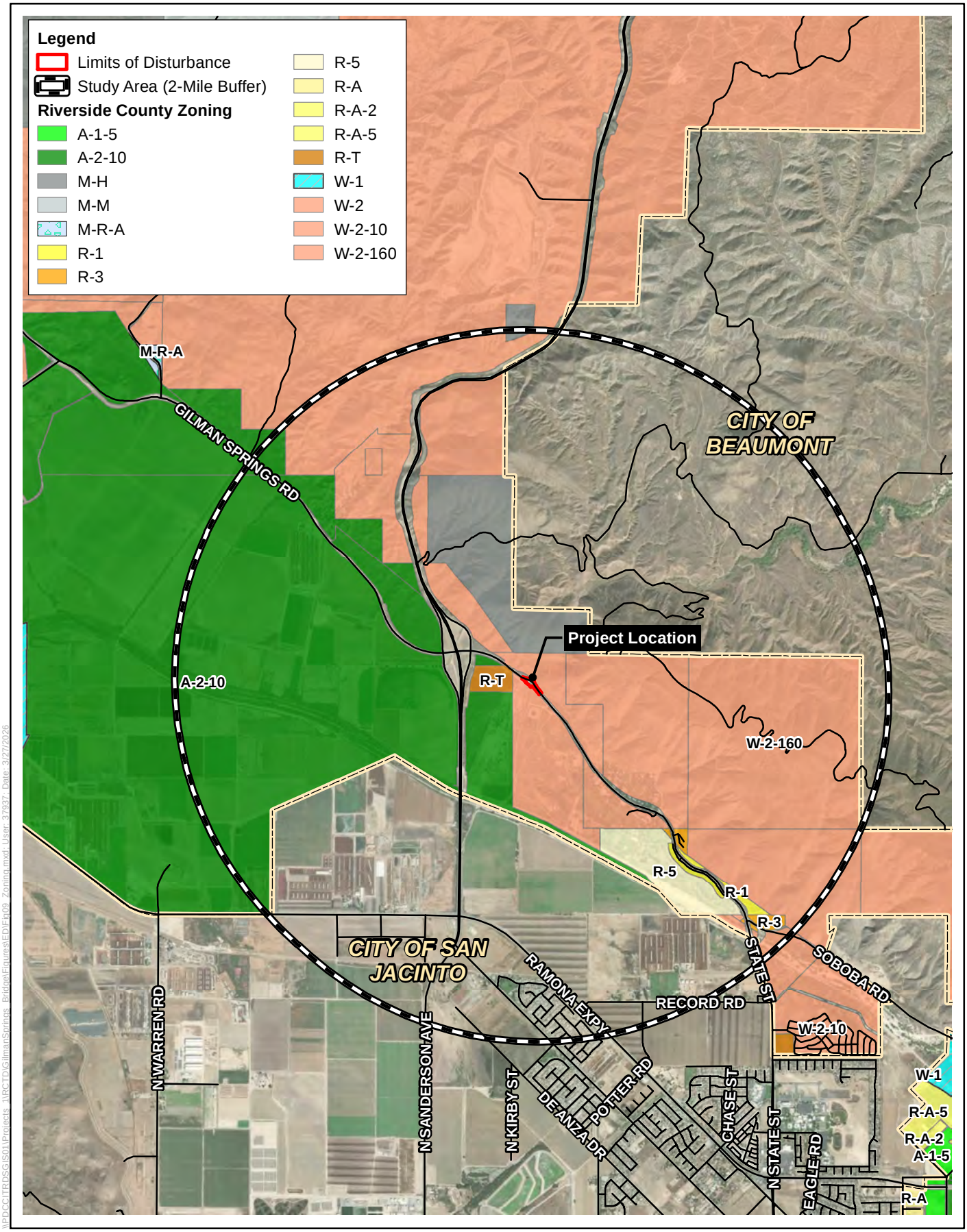


Figure 2.11-2
Zoning
Gilman Springs Road Bridge Replacement Project

2.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XII. 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 recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

2.12.1 Regulatory Setting

No federal regulations apply to this resource.

State

Surface Mining and Reclamation Act

The Surface Mining and Reclamation Act of 1975 requires the State Geologist to classify land into Mineral Resource Zones (MRZs), according to the known or inferred mineral potential of the land. The Department of Conservation's Division of Mine Reclamation and the State Mining and Geology Board are jointly charged with ensuring proper administration to the act's requirements. The process is based solely on geology, without regard to existing land use or land ownership. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized before land-use decisions are made that could preclude mining.

The Surface Mining and Reclamation Act designates MRZs that are of statewide or regional importance. MRZs are designated into four classes that indicate the potential for a specific area to contain significant mineral resources:

- **MRZ-1:** Areas where the available geologic information indicates there is little or no likelihood of significant mineral deposits
- **MRZ-2:** Areas underlain by mineral deposits where geological data indicate that significant measured or indicated resources are present or 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 known mineral occurrences of undetermined mineral resources significance
- **MRZ-4:** Areas of known mineral occurrences where geological information does not rule out the presence or absence of significant mineral resources

Local

County of Riverside General Plan

Riverside County has diverse mineral resources, including extensive deposits of clay, limestone, iron, sand, and important aggregates (i.e., crushed rock, sand, and gravel) that have been influential in the development of the area and serve as an important component of the county's economy. The *County of Riverside General Plan*, Multipurpose Open Space Element (County of Riverside 2015), establishes the following applicable policies:

- **Policy OS 14.2:** Restrict incompatible land uses within the impact area of existing or potential surface mining areas.
- **Policy OS 14:** Restrict land uses incompatible with mineral resource recovery within areas designated Open Space-Mineral Resources and within areas designated by the State Mining and Geology Board as being of regional or statewide significance.

2.12.2 Discussion of Environmental Evaluation Question 2.12 – Mineral Resources

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact.

Riverside County has designated the land within the Project's LOD as MRZ-3 (County of Riverside 2015). However, there are no known mineral resources or extraction operations within or near the Project's LOD (USGS 2025). Additionally, there are no active mines near the Project (California Department of Conservation 2024). The Project would consist of the replacement of the existing Gilman Springs Road Bridge in an area with previous substantial ground disturbance due to construction of the bridge along Gilman Springs Road. Therefore, implementation of the Project would not cause a loss of availability of a known mineral resource that would be of value to the region and the residents of California. There would be no impact on mineral resources.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact.

As previously discussed above under Response (a), the Project is in an area with previous substantial ground disturbance due to construction of the bridge along Gilman Springs Road. Additionally, the Project would occur in an area where there are no known mineral resources or extraction operations. As such, there would be no loss of availability of a locally important mineral resource recovery site. Therefore, there would be no impact on mineral resources.

2.12.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.13 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XIII. NOISE: Would the project:				
a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?	☐	☐	☒	☐
b) Generate excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) Be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

2.13.1 Regulatory Setting

County of Riverside

Policy N1.3 of the *County of Riverside General Plan* specifies the maximum acceptable levels for noise-sensitive land uses, which include residential uses within the County. Exterior noise levels for both jurisdictions are limited to a weighted, 24-hour average noise level of 65 A-weighted decibels (dBA) community noise equivalent level (CNEL) (County of Riverside 2015).

The County of Riverside's Municipal Code addresses construction noise, stating:

> "…whenever a construction site is within one-quarter of a mile of an occupied residence or residences, no construction activities will be undertaken between the hours of six p.m. and six a.m. during the months of June through September and between the hours of six p.m. and six a.m. during the months of October through May. Exceptions to these standards will be allowed only with the written consent of the building official (County of Riverside 2019)."

2.13.2 Discussion of Environmental Evaluation Question 2.13 – Noise

a) Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?

Construction

Less-than-Significant Impact.

The Project would design a replacement bridge consisting of a two-lane, single-span cast-in-place, prestressed concrete box girder bridge. Construction would take approximately 18 months to complete. For the purposes of this analysis, all construction equipment was assumed to be in one phase and the three loudest pieces of equipment were considered to be operating at the same times. The three loudest pieces of equipment considered to be operating at the same time were, a grader, a sand blaster, and a jack hammer [8]. Table 2.13-1 shows the predicted noise levels at the closest developed land use located approximately 2,600 feet to the south.

Table 2.13-1 Construction related Noise Levels

Equipment	Usage %	L_{eq} @ 50 feet	L_{eq} @ closest land use[1]	Cumulative Leq @ closest land use[1]
Grader	40	81	47	56
Sand Blaster	20	89	54	
Jackhammer	20	82	48	

[1] – Closest land use is located approximately 2,600 feet
L_{eq} = equivalent noise level

Predicted construction related noise levels would be approximately 56 dBA Leq at the closest developed land use. The County's municipal code requires construction to be confined between six p.m. and six a.m. during the months of June through September and between the hours of six p.m. and six a.m. during the months of October through May when withing a quarter of a mile of an occupied residence. However, as the closest developed land use is of greater distance, this restriction would not apply. Therefore, impacts from construction are considered less than significant.

[8] List of equipment is based on email discussion with the project applicant.

Operations

Less-than-Significant Impact.

The Project would shift the existing bridge to the southwest. The new bridge would be approximately 18 feet wider but would maintain the existing two-lane configuration. As the Project would not increase traffic volumes along Gilman Springs Road, traffic noise increases are not anticipated. Additionally, as the Project would not halve the distance between the closest source and the bridge[9] no increase in traffic noise is anticipated associated with the shift in the alignment. Given the distance to the closest land use is 2,600 feet away and the fact the project itself does not increase capacity of the roadway, no increases in stationary noise or an increase in ambient noise are anticipated. Impacts are considered less than significant.

b) Would the project generate excessive groundborne vibration or groundborne noise levels?

Less-than-Significant Impact.

Any groundborne noise or vibration would be limited to the construction period and would be short in duration. The Project would include general construction techniques such as pavement-breaking, cast in drilled hole, paving and other construction activities. Based on the Federal Transit Administration's *Transit Noise and Vibration Impact Assessment Manual*, the typical type of construction equipment involved in pavement breaking (a hoe ram) produces a peak particle velocity (PPV) of 0.089 PPV inches per second (in/sec) at a reference distance of 25 feet (Federal Transit Administration 2018). The manual references the damage potential for buildings extremely susceptible to vibration damage at 0.12 PPV in/sec. No vibration-sensitive structures are anticipated within 25 feet of construction activities. As discussed above, the closest structure is approximately 2,600 feet south of the bridge. Therefore, vibration levels would be well below the threshold of perception. Impacts from vibration during construction are considered less than significant.

c) Would the project be located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?

No Impact.

The closest airport is Hemet-Ryan airport located approximately 8 miles south of the Project area. Additionally, the Project would not introduce any new residences into the area. Therefore, no impact would occur.

[9] No increases by a factor of 6 dB per doubling of distance. The closest developed land use is approximately 2,600 feet south. Therefore, in order for noise levels to increase by 6 dB, the bridge would have to shift approximately 1,300 feet to the south.

2.13.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.14 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

2.14.1 Regulatory Setting

No federal, State, or local regulations apply to this resource.

2.14.2 Discussion of Environmental Evaluation Question 2.14 – Population and Housing

a) 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 extension of roads or other infrastructure)?

No Impact.

The Project is programmed as part of the HBP, Project ID No. 4160, Federal Project No. BRLS-5956(238). The Project would reconstruct the existing Gilman Springs Road Bridge, which was built in 1926 and partially reconstructed in 1949. Additionally, the Project would realign Gilman Springs Road to improve safety and to promote the flow of traffic. Gilman Springs Road is classified as a Secondary Highway in the *County of Riverside General Plan*. The road currently consists of two undivided lanes, one in each direction. No additional travel lanes would be included as part of the Project. The realignment of Gilman Springs Road is consistent with the road's designation as a Secondary Highway in the Circulation Element of the County's general plan. Therefore, the Project is consistent with the goals and policies of the *County of Riverside General Plan*, Land Use Element, and the SJVAP.

The Project does not include construction of new homes or businesses and would not lead to significant unplanned population growth in the area, directly or indirectly. No residences or businesses are located directly adjacent to the Project. Further, adjacent properties do not have structures that would be potentially affected by the Project. No developable land areas would be made more accessible by the Project that would lead to changes in land use and density. Therefore, the Project would have no direct or indirect long-term impacts related to population growth. No impacts are anticipated.

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

No Impact.

The Project would replace the existing Gilman Springs Road Bridge. No building structures are located near the Project. Thus, the Project would not result in the displacement of a significant number of residents or housing in the surrounding areas, necessitating the construction of replacement housing. The Project would not require relocation or displacement of residences or businesses. There would be no impact.

2.14.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.15 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities; need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

2.15.1 Regulatory Setting

No federal, State, or local regulations apply to this resource.

2.15.2 Discussion of Environmental Evaluation Question 2.15 – Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i) Fire protection?

No Impact.

Fire protection and emergency medical services for the Project area are provided by the Riverside County Fire Department, which provides fire protection and emergency medical services to the unincorporated Riverside County and the City of San Jacinto through a cooperative agreement between the city and the county. The nearest fire station is Riverside County Fire Department Station 78 (2450 Cottonwood Ave, San Jacinto), approximately 4 miles south of the Project LOD (Riverside County Fire Department 2024).

The Project involves the replacement of an existing bridge and roadway realignment on Gilman Springs Road. The Project would not induce population growth, increase the demand for new fire

protection facilities, or require the need for physical alteration of existing fire protection facilities. The Project would improve the ability of fire service providers to serve the Project area because it would reduce safety risks by increasing sight distance and improving travel times, which would likely reduce response times for these services after construction is completed.

Construction activities have the potential to result in temporary, localized, site-specific disruptions in the Project area involving partial or complete roadway and lane closures. This could lead to an increase in delay times for emergency response vehicles during construction. However, these delays, should they occur, would be temporary and minor in nature. Nevertheless, the traffic lane closures, if needed, would be included in the TCP (see **SM TRA-1** in Transportation Section 2.17.3) that is prepared and coordinated with a public information program during construction, including notifying fire protection providers prior to the start of construction activities, to further reduce potential impacts during construction, should they occur. Therefore, no impact would occur.

ii) Police protection?

No Impact.

Law enforcement and police protection services for the Project area are provided by the Riverside County Sheriff's Department. The nearest police station is the San Jacinto Police Department (160 W. 6th Street, San Jacinto), approximately 4.75 miles southeast of the Project LOD (Riverside County Sheriff's Department 2024).

As mentioned previously in Section 2.15.2(a)i, the Project would not induce population growth in the area beyond that previously planned for and would not result in the need for additional police protection. Thus, no impacts from operation of the Project would occur. The proposed realignment of the roadway would likely improve travel times and thus, emergency access through the Project area, which would have a beneficial impact.

As mentioned previously in Section 2.15.2(a)i, the temporary lane closure or detours could affect the response times for police service providers. However, these delays, should they occur, would be temporary and minor in nature. Traffic lane closures, if needed, would be included in the TCP (see **SM TRA-1** in Section 2.17.3) that is prepared and coordinated with a public information program during construction, including notifying police service providers prior to the start of construction activities, to further reduce potential impacts during construction, should they occur. Therefore, no impact would occur.

iii) Schools?

No Impact.

The closest school to the Project site is Clayton A. Record Jr. Elementary at 1600 Malaga Drive, San Jacinto (2.8 miles southeast of the Project LOD)(San Jacinto Unified School District 2024). The Project involves the replacement of an existing bridge and roadway realignment. The Project would not induce population growth, increase the demand for new school facilities, or require the need for physical alteration of existing school facilities. No impacts are anticipated.

iv) Parks?

No Impact.

The closest public park is Colonel Lewis Millett Park (2001 Ramona Boulevard, San Jacinto) approximately 1.75 miles south of the Project LOD. The Colonel Lewis Millett Park is 5.8 acres and includes a full-size basketball court, soccer field, and softball diamond.

The Project involves the replacement of an existing bridge and roadway realignment. The Project would not induce population growth, increase the demand for new public parks, or require the need for physical alteration of existing parks. Therefore, there would be no impact.

v) Other Public Facilities?

No Impact.

The nearest medical center offering emergency services is the Hemet Global Medical Center (1117 E Devonshire Avenue, Hemet), approximately 6.75 miles southeast of the Project LOD. In addition, the nearest public library is the San Jacinto Public Library (595 S. San Jacinto Avenue, San Jacinto) approximately 4.75 miles southeast of the Project LOD. The San Jacinto Public Library is part of the Riverside County Library System. There are no other public facilities in the Project vicinity. There are no other public facilities in the Project vicinity.

As discussed in Section 2.15.2(a)i, the temporary lane closure or detours could affect the response times for emergency service providers, including ambulances. Traffic lane closures, if needed, would be included in the TCP (see **SM TRA-1** in Transportation Section 2.17.3) that is prepared and coordinated with a public information program during construction, including notifying emergency service providers prior to the start of construction activities, to further reduce potential impacts during construction, should they occur. However, these delays, should they occur, would be temporary and minor in nature. Therefore, there would be no impact.

2.15.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.16 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XVI. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

2.16.1 Regulatory Setting

No federal, State, or local regulations apply to this resource.

2.16.2 Discussion of Environmental Evaluation Question 2.16 – Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact.

The Project would not induce the use of existing parks or recreational facilities such that substantial physical deterioration would occur or be accelerated. Therefore, there would be no impact.

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?

No Impact.

The Project would not include recreational facilities or require the construction or expansion of recreational facilities. The San Jacinto Wildlife Area (SJWA) is located to the east of the Project LOD. The SJWA is approximately 19,000 acres, with about 9,000 acres of reclaimed wetlands and anywhere from 600 to 800 acres of freshwater marsh habitat. In general, the recreational opportunities at the SJWA include wildlife viewing and hunting (CDFW 2019). However, the area of the SJWA immediately adjacent to the Project is the Potrero Reserve, which is cooperatively managed by Riverside County Habitat Conservation Agency and CDFW and is not currently open to the public (Riverside County Habitat Conservation Agency 2024).

The Project would not impact any areas of the SJWA as the Project LOD does not overlap with the SJWA boundary. Therefore, the Project would have no impact on recreation resources.

2.16.3 Avoidance, Minimization, and Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

2.17 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XVII. TRANSPORTATION: Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☐	☒	☐

2.17.1 Regulatory Setting

The *County of Riverside General Plan*, Circulation Element, establishes the following applicable policies (County of Riverside 2020):

- **Policy C 1.5:** Evaluate the planned circulation system as needed to enhance the arterial highway network to respond to anticipated growth and mobility needs.
- **Policy C 1.6:** Cooperate with and where appropriate lead local, regional, state, and federal agencies to establish an efficient circulation system.
- **Policy C 3.2:** Maintain the existing transportation network, while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.
- **Policy C 3.24:** Provide a street network with quick and efficient routes for emergency vehicles, meeting necessary street widths, turn-around radius, secondary access, and other factors as determined by the Transportation Department in consultation with the Fire Department and other emergency service providers.

2.17.2 Discussion of Environmental Evaluation Question 2.17 – Transportation and Traffic

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle, and pedestrian facilities?

No Impact.

The Project would not result in any activities that would conflict with a program, plan, ordinance, or policy regarding the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Gilman Springs Road currently consists of two undivided lanes, one in each direction, is programmed as part of the HBP and is classified as a Secondary Highway in the

County of Riverside General Plan. According to the *County of Riverside General Plan*, a Secondary Highway is intended to serve through traffic along longer routes between major traffic generating areas or to serve property zoned for multiple residential, secondary industrial or commercial uses. The bridge replacement along Gilman Springs Road would result in uses similar to existing conditions and is consistent with the road's designation as a Secondary Highway in the Circulation Element of the County's general plan. Further, the Project would incorporate a new roadway alignment that will improve sight distance and permit an increase in the speed limit and, hence, improve roadway geometrics, safety and traffic flow along Gilman Springs Road. Improved roadway geometrics, safety and traffic flow would also improve traffic flow when accidents or repairs divert traffic away from SR-79 and onto Gilman Springs Road. As such, the Project would not conflict with adopted policies, plans, or programs regarding public transit, roadways, bicycle, or pedestrian facilities. No impact would occur.

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

No Impact.

State CEQA Guidelines Section 15064.3(b) requires CEQA documents for transportation projects to evaluate impacts of projects on Vehicles Miles Traveled (VMT). The Project does not include the development of additional residential units, commercial establishments, or other uses that would increase the number of roadway users along Gilman Springs Road. Roadway capacity for Gilman Springs Road would be similar to existing conditions with two lanes, one in each direction. As the Project involves replacement of the existing Gilman Springs Road Bridge, it would not result in an increase in VMT, nor result in any activities that would conflict with or be inconsistent with State CEQA Guidelines. The Project would result in similar uses to existing conditions but would also improve roadway geometrics, safety and traffic flow along Gilman Springs Road (as described under threshold a above). No impact would occur.

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

No Impact.

The Project would replace the existing Gilman Springs Road Bridge over Potrero Creek. Gilman Springs Road is currently classified as a Secondary Highway in the *County of Riverside General Plan* and consists of two undivided lanes, one in each direction. The proposed replacement bridge would consist of a two-lane, single-span cast-in-place, prestressed concrete box girder bridge. The span length is anticipated to be longer to provide adequate hydraulic conveyance for Potrero Creek and to provide a wildlife crossing under the bridge.

Currently, heavy traffic volumes combined with the poor roadway alignment has resulted in heavy congestion during peak hours and motorist safety concerns. The Project would incorporate a new roadway alignment that will improve sight distance and allow for an increase in speeds, thereby improving traffic flow in the area. In addition to improving traffic flow and safety, the Project will replace the aging bridge, which was constructed in 1926 and is nearing the end of its

service life. Thus, the Project is expected to improve traffic flow and would not increase hazards due to a geometric design or incompatible uses. No impact would occur.

d) Would the project result in inadequate emergency access?

Less than Significant.

Construction of the Project could affect response times for emergency service providers. Temporary impacts on circulation and access could potentially result from construction activities that may require partial closures of traffic lanes. This could lead to an increase in delay times for emergency response vehicles during construction. However, any delays, should they occur, affecting emergency response vehicles will be addressed through implementation of a Traffic Control Plan or TCP (**SM TR-1)**. The TCP would include emergency travel routes and access to, through and around active construction areas. In addition, the County's public affairs will also communicate with emergency service responders on any potential detours and/or closures during construction. With the implementation of a TCP, potential impacts on response times during construction would be reduced. Once operational, the new bridge would incorporate a new roadway alignment that will improve sight distance and allow for an increase in the speed, thereby improving the traffic flow. Improvements to traffic flow and congestion would be expected to improve emergency access and emergency response times in the area, which would have a beneficial impact on emergency response times. Therefore, impacts on emergency access are considered less than significant.

2.17.3 Avoidance, Minimization, and Mitigation Measures

The following standard measure will be implemented to avoid or minimize impacts.

SM TR-1: Traffic Control Plan

A Traffic Control Plan or TCP will be prepared for the Project. The goals of the TCP during Project construction will include minimizing traffic delay or time spent in queue; maintaining traffic flow throughout the Project area and the surrounding areas; and providing a safe environment for the work force, motorists, and pedestrians. The TCP will include traffic routing plans for vehicles and pedestrians, signage, and location of physical barricades to protect the work zone. The TCP will be prepared prior to any construction activities occurring on site and would be prepared by the contractor.

2.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XVIII. 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, 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), or	☐	☒	☐	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

2.18.1 Regulatory Setting

CEQA defines tribal cultural resources (TCRs) as "sites, features, places, and objects with cultural value to descendant communities or cultural landscapes; and sacred places including, but not limited to, Native American sanctified cemeteries, places of worship, religious or ceremonial sites, or sacred shrines." These resources must be listed in the NAHC's Sacred Lands File, included in or eligible for the California Register of Historical Resources (CRHR), included in a local register of historical resources, or be determined significant by the CEQA lead agency (Public Resources Code 21074). Under CEQA (PRC Section 21084.2), a project 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. At present, only the Soboba Band of Luiseño Indians has requested consultation under AB 52 for this Project.

County of Riverside General Plan

While TCRs are not explicitly mentioned in the *County of Riverside General Plan*, the County recognizes the importance of protecting and preserving cultural resources for scientific, historic, and/or religious reasons to communities, descendant groups, and individuals of the County of Riverside. The *County of Riverside General Plan,* Multipurpose Open Space Element (County of Riverside 2015), contains the following policies relevant to TCRs.

- **OS 19.1** Cultural resources (both prehistoric and historic) are a valued part of the history of the County of Riverside.
- **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. (AI 144)

- **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. (AI 145)
- **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.

Native American Tribal Consultation

The results of a Sacred Lands File Search, conducted by the Native American Heritage Commission for the Project on December 18, 2023, indicated that no sacred lands have been previously reported in the Project area. In addition, the NAHC provided a list of Native American contacts who might have knowledge of cultural resources in the proposed Project area. The County reached out to six tribes inviting consultation under AB 52: Morongo Band of Mission Indians, Pala Band of Mission Indians, Pechanga Band of Indians, Rincon Band of Luiseño Indians, Soboba Band of Luiseño Indians, and Yuhaaviatam of San Manuel Nation. The Soboba Band of Luiseño Indians has requested consultation under AB 52.

2.18.2 Discussion of Environmental Evaluation Question 2.18 – 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, 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)?

Less-than-Significant Impact with Mitigation.

A records search was obtained from the EIC for the proposed Project to determine if TCRs are present within the Project site. No TCRs that are listed in or eligible for listing in the CRHR were identified during the records search; however, TCRs are not typically recorded. An NAHC Sacred Lands File search of the Project area did not identify any TCRs in the Project area.

Therefore, the Project would not cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources.

In addition, previous construction of the existing bridge and Gilman Springs Road have likely heavily disturbed much of the surface deposits throughout the Project LOD. Therefore, the potential for the Project to encounter or affect subsurface cultural materials during construction is also considered low. **MM TCR-1** will be implemented to provide monitoring during ground-disturbing activities in areas of previously undisturbed and native soils. **MM TCR-2** will be implemented if any subsurface cultural materials are encountered during construction. Therefore, impacts would be less than significant with mitigation.

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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less-than-Significant Impact with Mitigation.

Refer to Checklist Response 2.18.2a. One tribe, the Soboba Band of Luiseño Indians, requested to consult with the County under AB 52. The County and the tribe conducted a consultation meeting on February 6, 2025, and on March 18, 2025, the County provided draft standard measures and a draft monitoring plan to the tribe for review and comment. The County determined that no significant TCRs were identified in the project area as a result of the AB 52 consultation process. However, the Soboba Band of Luiseño Indians identified a TCR adjacent to the Project area.

To appropriately respond to unanticipated and inadvertent discovery of a TCR that may be identified in the Project area during Project construction, **MM TCR-1** will be implemented to provide Native American monitoring during ground-disturbing activities in areas of previously undisturbed and native soils. **MM TCR-2** will be implemented if any subsurface cultural materials are encountered during construction. Therefore, impacts would be less than significant with mitigation.

2.18.3 Avoidance, Minimization, and Mitigation Measures

During construction, **MM TCR-1** and **MM TCR-2**, as detailed below, will be implemented to avoid or minimize potential impacts should TCRs or human remains be unexpectedly discovered during construction.

MM TCR-1

Due to the general sensitivity of the project area, the County of Riverside will retain a Native American Monitor to provide monitoring during ground-disturbing activities in areas of previously undisturbed and native soils.

One Native American Monitor will be present during ground-disturbing activities in areas of previously undisturbed and native soils.

If multiple tribes request to provide monitoring, tribal monitoring will be scheduled on an alternating basis between the Consulting Tribes. Tribal Monitors scheduled by the County will be compensated. In addition, if a tribe wishes to have a tribal representative onsite to observe ground-disturbing activities when its Tribal Monitor is not scheduled to work on the project, the tribe may do so at its own expense.

The Native American Monitor will only be present onsite during construction that involves ground-disturbing activities such as, but not limited to, boring, grading, excavation, trenching, or drilling within previously undisturbed and native soils.

Native American monitoring will not occur for work activities that include the demolition and removal of nonnative materials, such as existing concrete, asphalt pavement, and pavement base layers, or ground-disturbing activities that occur within previously disturbed areas.

Attendance by Native American Monitors during construction of the project is at the discretion of the tribe, and the absence of a Native American Monitor, should the tribes choose to forgo monitoring for some reason, will not delay work.

The Native American Monitor will complete daily monitoring logs that provide descriptions of construction activities, locations, soil, and any cultural materials identified.

If a potential cultural resource is discovered, the Native American Monitor will immediately notify the archaeologist, construction foreman, and the County; and work will stop within 60 feet of the find. The Qualified Archaeologist, in cooperation with the Native American Monitor, will use flagging tape, rope, or some other means, as necessary, to delineate the area of the find, plus a 60-foot buffer, within which construction will halt.

Native American monitoring will end when ground-disturbing activities that have potential to unearth or impact potential cultural resources are completed or the Tribal Monitor has indicated that all upcoming ground-disturbing activities will not affect TCRs.

MM TCR-2

A tribal cultural resource (TCR) is a site, feature, place, cultural landscape, sacred place, or object that is of cultural value to a tribe and is either on or eligible for the California Register of Historic Resources or a local historic register, OR the Lead Agency, at its discretion, chooses to treat the resource as a TCR (See: PRC 21074 (a)(1)(A)-(B)).

If a potential TCR is unexpectedly discovered during construction, as per PRC 21074(a)(2), the County will determine if the resource is a TCR pursuant to criteria set

forth in subdivision (c) of Section 5024.1. If potential TCRs are discovered during construction, all work must halt within a 60-foot radius of the discovery.

Any discovery is to be kept confidential and secure to prevent any further disturbance. There will be no publicity regarding any TCRs recovered.

Isolates and clearly non-significant deposits will be documented in the field and collected so that monitored work can proceed. Otherwise, all potential TCRs unearthed by project construction activities will be evaluated by the Qualified Archaeologist in consultation with the Native American Monitor. Native American artifacts and finds suspected to be TCRs will be treated as such until the County has determined otherwise through consultation with Consulting Tribes. The County, Caltrans, and Consulting Tribes will determine mutually acceptable treatment of TCRs.

Construction will not take place within the delineated area of the TCR until either 1) mitigation measures have been agreed on between the County and the AB52 Consulting Tribes, pursuant to PRC Section 21080.3.2, and that mitigation is carried out; or 2) if agreement cannot be reached, one or more of the standard mitigation measures described in PRC Section 21084.3 is carried out.

2.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

2.19.1 Regulatory Setting

The *County of Riverside General Plan*, Circulation Element (County of Riverside 2020), establishes the following applicable policies:

- **Policy C.4:** Utilize existing infrastructure and utilities to the maximum extent practicable and provide for the logical, timely, and economically efficient extension of infrastructure and services.
- **Policy C 25.1:** Promote and encourage efficient provisions of utilities such as water, wastewater, and electricity that support Riverside County's Land Use Element at buildout.
- **Policy C 25.2:** Locate new and relocated utilities underground when possible and feasible. All remaining utilities shall be located or screened in a manner that minimizes their visibility by the public.

2.19.2 Discussion of Environmental Evaluation Question 2.19 – Utilities and Service Systems

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less-than-Significant Impact.

The Project would affect existing surface or subsurface utility facilities, requiring protection in-place, removal, or relocation. Construction of the Project would include modification of existing drainage facilities to receive an increased flow from additional impervious surface areas created by the Project. In addition, utility relocations and adjustments may be necessary (e.g., conduits attached to the bridge and power pole relocation). Relocation plans for any utilities that would potentially need to be relocated, removed, or protected in place will be determined during the final design phase as specified in **SM UT-1** and **SM UT-2**. In addition, it is not anticipated that utility conflicts would occur during construction with the inclusion of **SM UT-2**. The standard measure requires the County to coordinate with affected utility providers to inform any affected utility users in advance about any potential service disruptions. Furthermore, the affected utilities would be relocated in accordance with State law and regulations and County policies. As a result, impacts from the potential relocation of utility facilities are considered less than significant.

Construction of the Project would not generate any wastewater. Operation of the Project would not generate the need for additional wastewater treatment because the Project is an existing bridge replacement and roadway realignment project and does not contain elements that would generate wastewater. Therefore, the Project would not exceed wastewater treatment requirements. No impact would occur.

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

No Impact.

The Project would replace the existing Gilman Springs Road Bridge and realign the curvature of the roadway. The Project would not require new or expanded water entitlements. Water used during construction would be limited to water trucked to the site for dust control. The amount of water used during construction would be minimal. Operation of the Project would not result in an increase in demand for water. As a result, the Project would not require the water districts serving the vicinity of the surrounding Project area to provide new or expanded facilities to meet the need for water during construction and operation of the Project. No impact would occur.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact.

The Project is an existing bridge replacement and roadway realignment project. The Project would not construct any new residential or non-residential structures that could induce population or employment growth. Therefore, the Project would not increase the demand for wastewater treatment or affect capacity of wastewater treatment facilities. No impact would occur.

d) 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?

No Impact.

During construction, waste materials such as vegetation, other plant material, excess soils and solid waste such as concrete, asphalt, and wood would be collected. The waste collected during construction would be properly disposed of at an existing landfill or recycled. The amount of waste that would be generated during construction of the Project would be limited and would occur only during the construction period. The amount of waste would be only a very small amount of the total waste disposed of or recycled at area recycling facilities and landfills, on both a daily and annual basis. Therefore, the amount of waste generated during construction of the Project is anticipated to be accommodated by the existing recycling and landfill facilities in Riverside County.

Trash/waste removal would continue consistent with current maintenance activities during operation. Similar amounts of trash/waste would be collected during operation of the Project compared to existing conditions, as the Project would consist of replacement of an existing bridge and realignment of the existing roadway. Therefore, the amount of waste generated during operation of the Project would be negligible, and there would be no impact.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact.

The Project is an existing bridge and roadway realignment project that would not generate a substantial amount of solid waste during construction activities or maintenance during Project operation. Maintenance within the Project LOD would involve roadway maintenance including pavement maintenance, roadside litter/sweeping, and upkeep of signs and markers. Solid waste generated during the construction and operational phases of the Project would be disposed of in accordance with federal, State, and local regulations related to construction waste and recycling, which would minimize the amount of waste material entering local landfills. Therefore, no impacts are anticipated.

2.19.3 Avoidance, Minimization, and Mitigation Measures

The following standard measures will be implemented to avoid or minimize potential impacts.

SM UT-1

During final design, relocation plans for any utilities that will potentially need to be relocated, removed, or protected in place will be prepared in consultation with the affected utility relocation providers/owners. If relocation is necessary, the final design will focus on relocating utilities within the ROW or other existing public ROWs and/or easements. For all utility relocation activities, the County will coordinate with affected utility owners regarding potential utility relocations and the affected utility owners will inform affected utility users in advance of the date and timing of potential service disruptions. If relocation outside of existing or additional public ROWs and/or easements required for the Project is necessary, the final design will focus on relocating those affected utilities.

SM UT-2

Prior to and during construction, the County shall ensure that the components of the utility plans provided in the Project specifications are properly implemented by the contractor.

2.20 Wildfire

	Potentially Significant Impact	Less Than Significant with Mitigation	Less-Than-Significant Impact	No Impact
XX. 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 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?	☐	☐	☐	☒

2.20.1 Regulatory Setting

SB 1241 required the Office of Planning and Research, the Natural Resources Agency, and CAL FIRE to develop amendments to the CEQA Checklist for the inclusion of questions related to fire hazard impacts for projects on lands classified as Very High FHSZs. The 2018 updates to the State CEQA Guidelines expanded this to include projects "near" these Very High FHSZs.

2.20.2 Discussion of Environmental Evaluation Question 2.20 – Wildfire

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-than-Significant Impact.

The Project area is located in unincorporated Riverside County, north of the City of San Jacinto. The County of Riverside has an Emergency Operations Plan that provides guidelines for emergency response planning, preparation, training, and execution throughout the jurisdictions. Construction of the new bridge is anticipated to be completed in two stages while the flow of traffic on Gilman Springs Road is maintained. However, it is possible that a full roadway closure may be necessary during construction. This would be determined once traffic analysis results are available. Temporary roadway closure may result in short-term effects on emergency response and evacuation along and in the vicinity of the surrounding Project area. This could result in increased travel times for emergency service providers. During construction, a TCP (**SM TR-1** will be implemented to minimize these obstructions, which will help to ensure continued emergency access to the Project area and nearby properties. The Project would not substantially

impair an adopted emergency response plan or emergency evacuation plan. Additionally, all Project construction would follow State and federal fire regulations.

Furthermore, once operational, the Project is expected to improve sight distance and permit an increase in the speed limit and, hence, improve traffic flow along Gilman Springs Road. Therefore, the operation of the Project would improve emergency response in the Project area. There would be a less-than-significant impact.

b) Would the project exacerbate wildfire risks due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less-than-Significant.

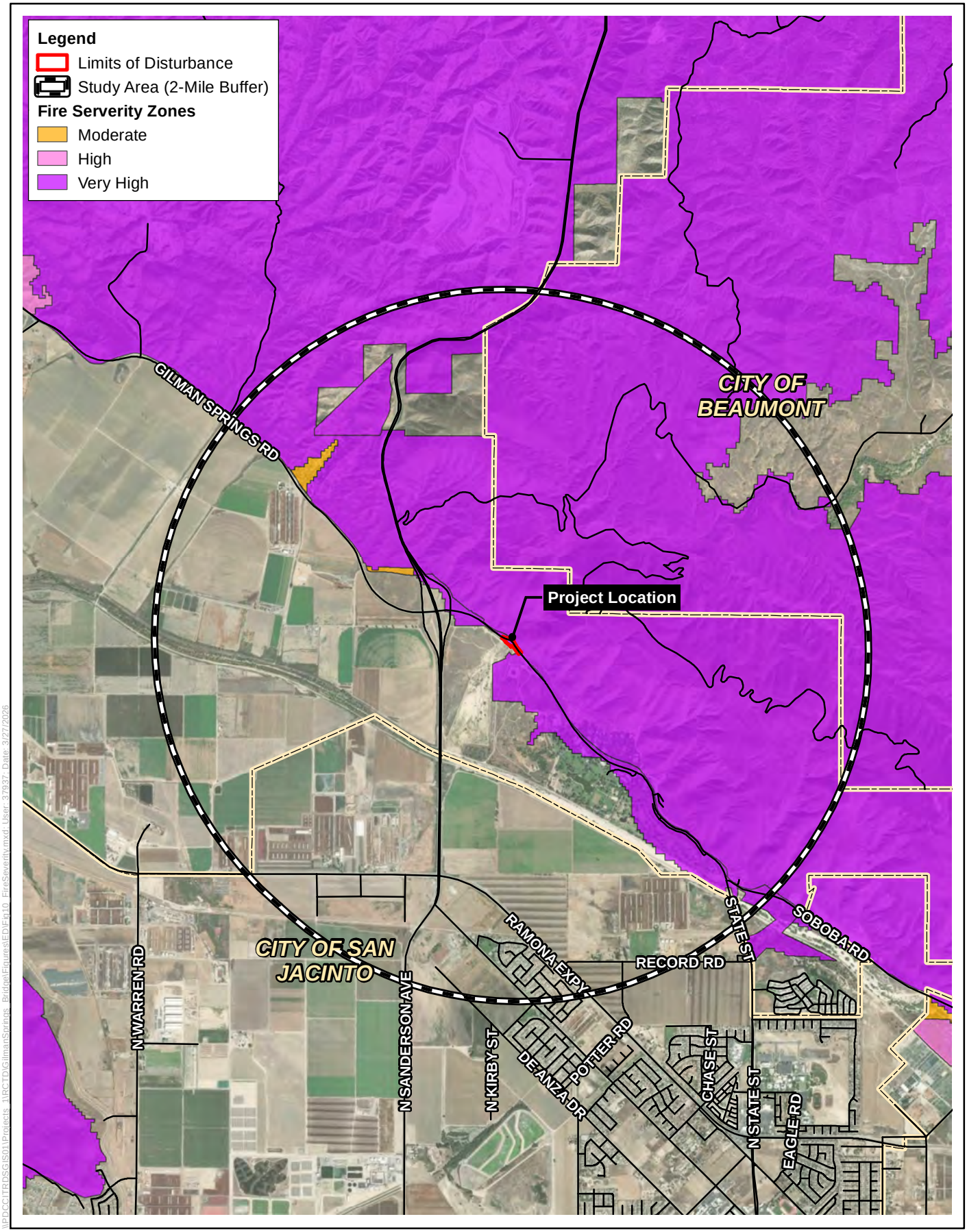
The Project is in an undeveloped hilly area of unincorporated Riverside County and is within a wildland area. Surrounding land uses include primarily agriculture to the south and west, and natural, protected lands in the San Jacinto Mountains to the north and east, including the Potrero Unit of the CDFW San Jacinto Wildlife Area. The Project LOD is within areas designated as Very High FHSZ (refer to Figure 2.20-1) (CAL FIRE 2023).

The Project is a transportation improvement project and would not provide housing; thus, no occupants would be exposed to wildfires or related pollutants. The Project would not install any infrastructure, such as new power lines or other utilities, that could exacerbate existing wildfire risk or expose people or structures to significant wildfire risk. Any affected utilities would be relocated in accordance with State law and regulations and County policies. Construction activities would be limited to the existing right of way and areas immediately surrounding the Project site. Although it is possible that a wildfire could affect areas adjacent to the Project, the Project itself consists of replacement of an existing bridge and roadway realignment, which would not expose additional people or structures to potential impacts other than those already part of the existing conditions. Additionally, the Project would not increase the existing road's capacity and, therefore, would not increase the number of vehicles on the roadway. Thus, the Project would not exacerbate wildfire conditions and impacts would be less-than-significant.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact.

See response to Section 2.20(b) above.



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Figure 2-20-1
Fire Severity Zone
Gilman Springs Road Bridge Replacement Project

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact.

See response to Section 2.20(b) above.

2.20.3 Avoidance, Minimization, and Mitigation Measures

During construction, **SM TR-1: Traffic Control Plan**, detailed in Section 2.17, *Transportation*, will be implemented to ensure adequate emergency access. No additional measures are required.

2.21 Mandatory Findings of Significance

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

2.21.1 Discussion of Environmental Evaluation Question 2.21 – Mandatory Findings of Significance

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

Less-than-Significant Impact with Mitigation.

As discussed in Section 2.4, *Biological Resources*, the Project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. No impacts would occur on such biological resources.

Minor permanent and temporary impacts on USACE/RWQCB non-wetland WoUS (<0.01 acre and 0.13 acre, respectively) and CDFW unvegetated streambed (0.01 acre and 0.26 acre, respectively) would occur as a result of Project construction. Minor temporary impacts would also occur on CDFW riparian (0.01 acre). Effects from permanent impacts on jurisdictional aquatic resources would be self-mitigated on site from the beneficial effects of lengthening the bridge and space between the abutments by approximately 48 feet, which would result in a gain

of up to 0.11 acre in jurisdictional aquatic resources in the area, rather than a loss. Therefore, replacement lands for permanent impacts on jurisdictional aquatic resources at Potrero Creek are not proposed as there is no net loss. Temporary impacts would be replaced in-kind at their current locations at a 1:1 ratio (Measure **MM BIO-24**).

A total of 0.23-acre of Additional Reserve Lands would be temporarily disturbed during Project construction activities. A total of 0.01 acre of riverine resources would be permanently removed under the Project, and a total of 0.26 acre of riverine resources and 0.01 acre of riparian resources would be temporarily disturbed; no riparian resources would be permanently removed under the Project. Under the MSHCP, compensation for these losses shall be addressed through Measures **MM BIO-8** and **MM BIO-25** to ensure direct impacts on riparian/ riverine resources would be less than significant.

The Project would not eliminate important examples of the major periods of California history or prehistory. No impact on historical resources would occur because no eligible resources are within the Project area.

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

Less-than-Significant Impact.

As detailed below in Section 2.21.2, *Cumulative Impacts*, the Project would not result in cumulatively considerable effects when combined with past, present, and reasonably foreseeable future projects and, therefore, would have a less-than-significant impact.

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

Less-than-Significant Impact.

Operation of the Project would not result in the exposure of persons to any substantially adverse natural or human-made hazards that could directly or indirectly cause substantial adverse effects on human beings, such as geologic hazards, air emissions, hazardous materials, or flooding. All potential effects that could result in substantial exposure of persons to hazards during construction of the Project are fully addressed with recommended AMMs, and no permanent impacts have been identified as significant in this Initial Study. AMMs, as well as standard measures, would be implemented as part of the Project in order to reduce or avoid the potential impacts the Project would have on the environment. Impacts would be less than significant.

2.21.2 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this Project. A cumulative effect assessment looks at the collective impacts individual land use plans and projects pose. Cumulative impacts

can result from individually minor, but collectively substantial, impacts taking place over a period of time.

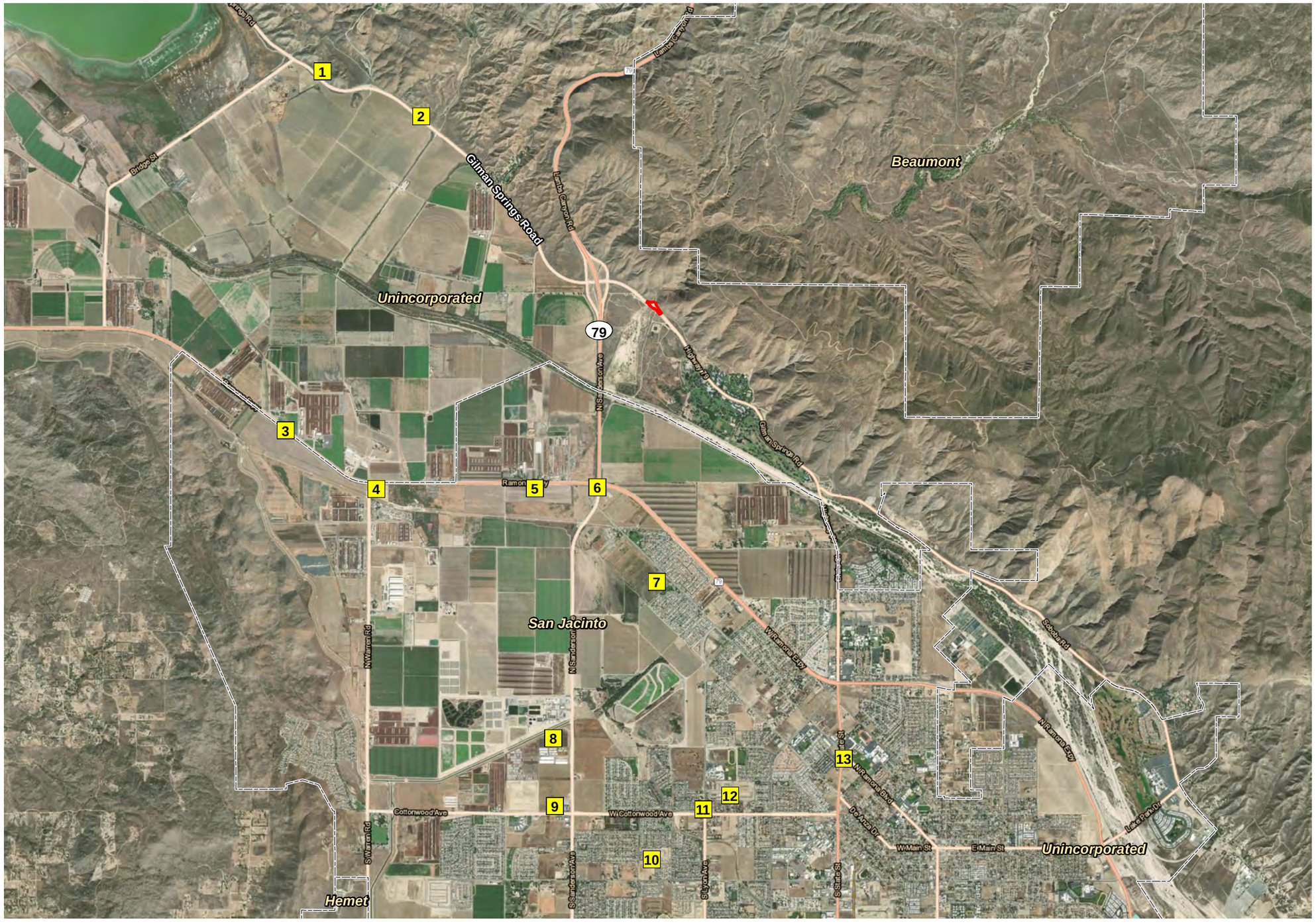
Cumulative impacts on resources in the Project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the Project, such as changes in community character, traffic patterns, housing availability, and employment.

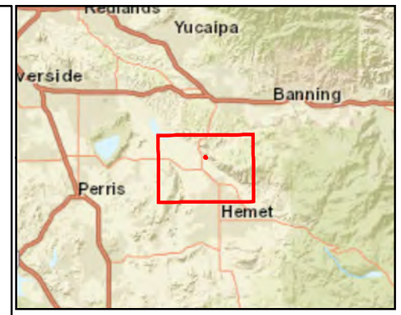
State CEQA Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in State CEQA Guidelines Section 15355.

A review of the City of San Jacinto, County, and regional agency websites was conducted in order to compile a list of past, present, and reasonably foreseeable future projects in the Project vicinity. The projects considered in the review of potential cumulative impacts are shown on Figure 2.22 1 and listed in Table 2.21-1.

The analysis following Table 2.21-1 evaluates the Project's potential to contribute considerably to a cumulative impact. As discussed previously, the Project would have no effect on agricultural and forestry resources, energy, GHG emissions, land use and planning, mineral resources, population and housing, recreational resources, and tribal cultural resources, and it would not contribute either directly or indirectly to a cumulatively considerable impact in these resource areas. The potential for the Project to result in cumulative impacts that would be considered significant in the above-mentioned resource areas is considered low because no impacts are anticipated from the Project on these resources, and the Project does not have the potential to result in cumulative impacts that would affect the health or sustainability of any of these resource areas.

For resources identified as having a less-than-significant impact or a less-than-significant impact with mitigation, a preliminary review of the potential impacts identified was conducted to determine if a reasonably foreseeable cumulative impact could occur. Based on this review, it was determined that the resources that could potentially contribute to significant cumulative impacts to a potentially considerable degree when combined with past, present, and reasonably foreseeable future projects are aesthetics, air quality, biological resources, cultural resources, geology/soils and paleontological resources, hazards/hazardous materials, hydrology and water quality, noise, public services, transportation, and utilities and service systems, and wildfire. However, as demonstrated below, the Project in conjunction with the Projects listed in Table 2.21-1 would not result in cumulatively considerable impacts.





Legend

- Project Location
- 2 Mile Buffer
- City Boundary
- Cumulative Projects
  - 1 - Gilman Springs Road Phase #6
  - 2 - Gilman Springs Road Phase #7
  - 3 - Ramona Expressway Resurfacing
  - 4 - Ramona Land Development
  - 5 - Mid County Parkway
  - 6 - SR-79 Realignment Project
  - 7 - Silver Beach Grand
  - 8 - TS Farms
  - 9 - Innovative Cultivation
  - 10 - Kirby Street
  - 11 - Lyon Avenue Project
  - 12 - Bray Subdivision
  - 13 - The Magnet

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Figure 2.22-1
Past, Present, and Reasonably Foreseeable Future Projects
Gilman Springs Road Bridge Replacement Project

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Table 2.21-1 Past, Present, and Reasonably Foreseeable Future Projects List

Map #	Name	Jurisdiction	Description	Status	Approximate Distance from the Project Site
1	Gilman Springs Road Safety Improvement Corridor – Phase 6 (Shoulder Widening & Passing Lane)	Riverside County Transportation Department	Approximately 4 miles of Gilman Springs Rd from 1.7 miles south of Alessandro Blvd to approximately 1 mile south of Bridge St	Construction underway	4.6 miles northwest
2	Gilman Springs Road Safety Improvement Corridor – Phase 7 (Shoulder Widening & Passing Lane)	Riverside County Transportation Department	1 mile south of Bridge St to SR 79	Pending funding	0.5 mile northwest
3	Ramona Expressway Resurfacing	Riverside County Transportation Department	5.24 miles of pavement resurfacing between Rider St and N. Warren Rd	Completed August 2021	3 miles southwest
4	Ramona Land Development	City of San Jacinto	East of Warren Rd and directly south of Ramona Expressway	**Proposed:** Environmental clearance underway	2 miles southwest
5	Mid County Parkway	FHWA, Caltrans, Riverside County Transportation Commission	Proposed 16-mile transportation corridor that will relieve traffic congestion for east-west travel between the San Jacinto and Perris areas	I-215 Placentia Ave Interchange completed in Dec 2022; Placentia Ave Widening completed Spring 2023; construction pending for remaining segments	1.5 miles south
6	SR-79 Realignment Project	Caltrans, Riverside County Transportation Commission	Realign State Route 79 between Domenigoni Parkway and Gilman Springs Road in the San Jacinto-Hemet area	Environmental document approved; construction pending funding	2 miles south

Map #	Name	Jurisdiction	Description	Status	Approximate Distance from the Project Site
7	Silver Beach Grand	City of San Jacinto	Near the intersection of North Ramona Blvd and Ranch View Ln	**Proposed:** Environmental clearance underway.	2 miles south
8	TS Farms	City of San Jacinto	Along Sanderson Ave, just north of Cottonwood Ave	Construction completed Spring 2023	4 miles southwest
9	Innovative Cultivation	City of San Jacinto	North of Cottonwood Ave and west of North Sanderson Ave	Construction underway	4 miles south
10	Kirby Street	City of San Jacinto	Between Kirby St to the west, Ivy Crest Dr to the east, and is bound partially by Oostdam Dr to the south	Construction underway	4.2 miles south
11	Lyon Avenue Project	City of San Jacinto	West side of Lyon Ave, approximately 137 feet north of Cottonwood Ave	**Proposed:** Environmental clearance underway; completion anticipated in summer 2025	3.75 miles south
12	Bray Subdivision	City of San Jacinto	South of Monte Vista Middle School, east of Lyon Ave and Appaloosa Dr, north of Cottonwood Ave, and west of Marylin Dr and Estrella St	Construction underway	3.5 miles south
13	The Magnet	City of San Jacinto	Southeast corner of Ramona Expressway (SR79) and State St	**Proposed:** Environmental clearance underway	3 miles southeast

Sources: Caltrans 2021; City of Moreno Valley n.d.; RCTC 2015, 2016; City of San Jacinto 2024.

Aesthetics

The resource study area (RSA) for aesthetics includes the Project LOD, construction traffic control limits, and the general surrounding vicinity. It is the area of land that is visible from, adjacent to, and outside the ROW, and it is determined by topography, vegetation, and viewing distance. The Project area provides views over the valley floor to the surrounding mountains and hillsides with few visual intrusions. However, there are no Caltrans officially designated vista points or any informal vista points used by the general public associated with the Project corridor.

As previously discussed in Section 2.1, Aesthetics, the Project is not within or adjacent to areas designated as scenic vistas, and there would be no impacts on scenic vistas as a result of the Project. The existing visual character of the Project vicinity would not be degraded or substantially altered by the Project. Changes associated with the Project would result in slight alterations to the existing visual character of the area within the RSA but would still appear largely consistent with the existing visual environment. The Project as proposed would look similar to existing conditions and vegetation removal would be minor.

Removal of one cottonwood tree near the southeast bridge abutment would be the most notable visual change as a result of the Project; however, the cottonwood tree is declining in health and is not, therefore, a notable visual resource contributing to the visual quality of the Project corridor. Therefore, the Project, in consideration with the cumulative projects, would not result in a significant cumulative impact related to aesthetics.

Air Quality

The RSA for cumulative air quality impacts is within the South Coast Air Basin under the jurisdiction of SCAQMD. The Basin is in attainment with the CAAQS for sulfates, hydrogen sulfide, visibility-reducing particles, and vinyl chloride, but is a nonattainment area for O_3, PM_{10}, and $PM_{2.5}$.

Construction of the Project would involve ground disturbance, hauling, and vehicle usage that would emit criteria air pollutants and toxic air contaminants. Project-related construction and operational emissions would be minimal and below SCAQMD's regional significance thresholds, which means they are unlikely to result in a cumulatively considerable impact. In addition, the Project will comply with fugitive dust regulations, including implementation of all applicable fugitive dust control measures required by SCAQMD Rule 403 during Project construction as defined in SM AQ-1. Therefore, cumulative impacts from the Project, in combination with the cumulative projects, would not be cumulatively considerable.

Biological Resources

The RSA used for assessing cumulative impacts on biological resources is based on the BSA. The BSA for the Project consists of the Project's LOD and a 300-foot buffer. The Project LOD is located along Gilman Springs Road in the immediate area of the existing Gilman Springs Bridge, and includes the proposed roadway realignment, proposed replacement bridge, and potential construction staging areas and creek access points.

Portions of the Project would occur in the BUOW, San Bernardino Kangaroo Rat, and Los Angeles Pocket Mouse MSHCP survey areas. The Project is not located within any MSHCP plant survey areas, including those for MSCHP Narrow Endemic Plant Species or MSHCP Criteria Survey Areas. The Project occurs within the boundaries of the SJVAP, Subunit 1: Gilman Springs/Southern Badlands, and it is located within Criteria Cell 2268 (Cell Group O). ARL areas are located along the southern border of the Project LOD within the Potrero Creek alluvial fan and surrounding uplands. ARL areas are also present along the northern edge of the 300-foot BSA buffer within the San Jacinto Mountains portion of the BSA. No PQP lands occur within the BSA.

Although the Project will have some incremental effects to the surrounding landscape, the cumulative effects of this Project and other current and future regional development covered by the MSHCP have been accounted for and mitigated by the establishment of a comprehensive reserve system. The Project shall be required to implement Measures **MM BIO-8**, **MM BIO-24,** and **MM BIO-25** to ensure cumulatively considerable direct impacts on jurisdictional aquatic resources and riparian/ riverine resources would be less than significant. Additionally, the Project shall be required to implement **AMM BIO-1** through **AMM-BIO-7**, **AMM BIO-9** through **AMM BIO-23,** and **AMM BIO-26** through **AMM BIO-30**, which would further reduce cumulatively considerable impacts on biological resources.

Cultural Resources

The RSA for cultural resources is established as the archaeological study area and built-environment study area (see Section 2.5, *Cultural Resources*, for more information). As discussed in Section 2.5, *Cultural Resources*, no prehistoric-period resources were identified in the Project area in the records search, the results of the Sacred Lands File search were negative, and the pedestrian survey was negative for archaeological resources. While archaeological site P-33-000175 is adjacent to the Project area, the archaeological survey did not identify any archaeological materials in the Project area near this resource. Additionally, the site would not be impacted by construction activities associated with the Project, and the entire site is excluded from the Project area. The results of the historical topographic map review suggest that the Project area may be considered to have a low sensitivity for 20th-century archaeological materials. The results suggest that the Project is unlikely to encounter buried archaeological resources and unlikely to have an adverse impact on cultural resources or TCRs.

While it appears that no cultural resources would be directly affected by Project activities, there is always a possibility of encountering unanticipated buried archaeological materials during subsurface excavations, although it is considered low for this Project. **SM CR-1** will be implemented to minimize potential impacts if cultural materials are discovered during construction.

Based on the results of the cultural resource record searches, surveys, and Native American consultation, there is no evidence of human remains within the Project area that the Project would affect. However, **SM CR-2** will be implemented to minimize impacts if human remains were unexpectedly encountered during construction.

None of the projects listed in Table 2.21-1 occur in the Project LOD and, therefore, the contribution of the Project to the cumulative destruction of cultural resources would not be cumulatively considerable.

Geology/Soils/Paleontological Resources

The RSA for geology, soils and paleontology is established as the Project LOD. The Project, in conjunction with other planned projects in the vicinity, may result in short-term increases in erosion due to grading activities. Earthwork in the Project area would be performed in accordance with standard measures, as described in Section 2.10.3, *Avoidance, Minimization, and Mitigation Measures*, in Section 2.10, *Hydrology and Water Quality*. Development in the seismically active region can put people and structures at risk from a wide range of earthquake-related effects, including seismic ground shaking. The existing level of seismic risk exposure represents a significant cumulative impact. However, as discussed above, various mechanisms are in place to reduce risks at the project level, including Project-specific hazards evaluation processes mandated by the Seismic Hazards Mapping Act, as well as seismic design standards promulgated by the applicable building codes. Although there would be some residual level of risk because seismic hazards cannot be entirely avoided, the Project would not contribute considerably to the existing cumulative impact related to seismic hazards. In addition, other cumulative projects would affect or be affected by geologic conditions/constraints at their project sites; such impacts generally do not combine with similar effects that could occur with other projects and therefore would not be expected to affect cumulative geological effects in the region.

The Project would be required to comply with federal and State laws and regulations and local laws and ordinances as they relate to paleontological resources. Cumulative project impacts on paleontological resources would vary based on the footprint of each project. All projects that could affect paleontological resources would be required to evaluate and assess impacts and, if necessary, provide mitigation measures as required by CEQA. Furthermore, a PMP (**SM GEO-1**) will be implemented for this Project, which will reduce or avoid potential impacts on paleontological resources in the Project area, should they be discovered during construction. Therefore, the contribution of the Project to the cumulative destruction of subsurface paleontological resources would not be cumulatively considerable.

Once the Project and other projects are operational, they would not have the potential to affect unknown and nonrenewable paleontological resources. Therefore, the operation of the Project, in conjunction with other projects, would not result in significant cumulative impacts under CEQA related to unknown and nonrenewable paleontological resources.

Hazards/Hazardous Materials

The RSA for hazards and hazardous materials consists of sites within the Project area and nearby properties in the vicinity (up to 1 mile). In general, only projects occurring in the vicinity of the Project are considered due to the limited potential impact area associated with the release of hazardous materials into the environment. Reasonably foreseeable projects in the Project's surroundings could result in construction impacts related to the routine transport, disposal, or

handling of hazardous materials; intermittent use and transport of petroleum-based lubricants, solvents, and fuels; and transport of affected soil to and from sites.

However, hazardous waste generated during construction of any project would be collected, properly characterized for disposal, and transported in compliance with regulations such as those described under Section 2.9.1, *Regulatory Setting*. In addition, affected sites under development would undergo remediation (as necessary) under oversight of applicable State and local agencies, effectively reducing the number of contaminants found in the RSA. Hazardous materials are strictly regulated by local, State, and federal laws. Specifically, these laws are designed to ensure that hazardous materials do not result in a gradual increase in toxins in the environment. For each of the reasonably foreseeable projects under consideration, various project-specific measures would be implemented as a condition of development approval to mitigate risks associated with exposure to hazardous materials. For these reasons, the Project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a significant cumulative hazards or hazardous materials impact. The Project's contribution to cumulative impacts would therefore not be cumulatively considerable.

Hydrology and Water Quality

The RSA for surface hydrology and water quality is the San Jacinto Watershed; the RSA for groundwater hydrology and quality is the San Jacinto Groundwater Basin. The context for cumulative hydrology and water quality impacts is geographic and a function of whether impacts could affect surface water features/watersheds, municipal storm drainage systems of the County of Riverside, or floodplains. Cumulative development could affect water quality if the land use changes, the intensity of the land use changes, or drainage conditions are altered to facilitate the introduction of pollutants to surface or groundwater resources. Changes in land use would alter the type and quantity of pollutants in stormwater runoff. An increase in the intensity of a land use would increase potential pollutant loads. Alterations in drainage patterns could increase pollutant loads by increasing the amount of stormwater runoff, transporting pollutants in stormwater runoff, causing or contributing to erosion if the rate of runoff increases, or exposing vulnerable areas to infiltration or runoff. Related projects would need to analyze current storm drain systems to assess runoff capacity. Cumulative growth and development could cause an increase in stormwater runoff, which would have an impact on the current storm systems. If the storm drain system does not have adequate capacity for increased runoff, then the storm drain system would need to be upgraded to accommodate the increases. An assessment would need to be conducted during new development to make sure the increase in stormwater is managed appropriately.

Other transportation improvement projects listed in Table 2.21-1 would require new drainage facilities to accommodate stormwater runoff and therefore would not exceed the capacity of existing or otherwise planned drainage facilities in the surrounding areas. Development of the Project could degrade stormwater quality through an increase in impervious surface area, as well as an increase in contaminated runoff, which could ultimately violate water quality standards and affect beneficial uses within the San Jacinto Watershed. The Project does not represent a substantial departure from the existing land use of the area but does increase the impervious surface area. However, water quality impacts will be further avoided or minimized with the inclusion of **SM WQ-1**, through which the Project will implement BMPs in accordance with those specified in the water pollution control plans, as well as any other permit conditions.

Construction of the Project as well as other planned projects in the vicinity would result in surface disturbances through the grading and compaction associated with typical development activities. Other roadway widening projects listed in Table 2.21-1 would result in similar types of impacts on water quality as the Project. However, future land use and transportation projects would be required to comply with NPDES requirements (for projects disturbing more than one acre), MS4 Permits, and County requirements and guidance. Related projects would also be required to implement water quality BMPs at the time of development. Construction of the Project may require in-water work and therefore could require dewatering or water diversion. However, dewatering and/or water diversions would occur on a temporary, short-term basis during the construction period only. In addition, construction activities would use commercially available water; groundwater sources would not be used for construction or operation of the Project. In the event dewatering is required for other planned projects in the vicinity, dewatering would be temporary and would not result in a loss of groundwater supplies. Development in highly urbanized areas would not be expected to increase the amount of impervious surfaces substantially because development would be occurring mostly in areas with a substantial amount of existing impervious surfaces. Therefore, groundwater recharged from rainfall would not be affected adversely. These measures would help ensure that future development within the San Jacinto Watershed would not have a cumulative adverse water quality impact. Cumulative impacts on water quality, as well as the Project's contribution to cumulative impacts, would not be cumulatively considerable.

Noise

The RSA for noise includes the area within 0.5 mile of each side of the Project. The closest developed land use is approximately 2,600 feet south. There are no residences within the Project area. Noise and vibration levels of the Project and any other related projects during construction would comply with the County of Riverside's Municipal Code. The Project does not involve changes that would result in noticeable operational increases in groundborne vibration, nor groundborne noise levels from use or maintenance of the bridge and roadway. Although the Project would shift the existing bridge to the southwest, no increase in traffic noise is anticipated in association with roadway realignment. Similarly, the Project is not expected to result in a change to the traffic volumes or mix along the Project alignment. The projects listed in Table 2.21-1 are all outside of the RSA for this resource. Phases 1 through 5 of the Gilman Springs Road Improvement Project occurred within the Project vicinity and did not result in significant impacts on noise. Therefore, the Project would not result in a cumulatively considerable impact related to noise.

Public Services

The RSA includes the unincorporated Riverside County and the City of San Jacinto within the limits covered by each service provider responsible for the portion of Gilman Springs Road associated with the Project. The Project involves the replacement of an existing bridge and roadway realignment of an existing roadway. The Project would not result in an increase in population and, therefore, would not increase demand for public services. To the extent that construction periods of the Project and related projects overlap, there is potential for cumulative impacts on emergency response times from multiple project detours and lane reductions occurring simultaneously adjacent to the Project area, although it is very minimal. The related

projects would not occur directly within the Project area, and, as such, it is unlikely that public services would be affected on a cumulative level. Lastly, implementation of **SM TRA-1** would help ensure emergency access within the RSA. Therefore, the Project would not contribute to a cumulative impact related to public services.

Transportation

The RSA for transportation includes the area within one mile of each side of the Project site. The Project accommodates existing traffic demand, but would have no permanent impact on traffic demand or level of service. The Project and the future transportation projects would include the preparation of a TCP (see **SM TRA-1**), to minimize traffic delays and to maintain traffic flow and safety. In addition, the County's public affairs will communicate with motorists, residents, transit facilities, and emergency service responders on any potential detours and/or closures. Construction impacts would be temporary and less than significant and will be further reduced or avoided with the inclusion of **SM TR-1**. Construction-related impacts from the Project would not result in cumulatively considerable traffic impacts.

To the extent that construction periods of the Project and related projects overlap, there is a potential for cumulative local level traffic impacts from multiple project detours and lane reductions occurring simultaneously adjacent to the Project area to result in deterioration of traffic operations on local roadways. However, the related projects that have the potential to occur at the same time as the Project would not occur directly within the RSA for this resource. Therefore, when combined with other development and transportation projects, the Project would not cause a substantial change because construction sites and schedules would be staggered throughout Riverside County as shown in Table 2.21-1. Therefore, the Project would not contribute to a cumulative impact related to transportation.

Wildfire

The RSA includes the community of Gilman Hot Springs in unincorporated Riverside County. The Project would not install any facilities that would exacerbate impacts related to wildfire. The Project is adjacent to an area of wildfire hazard; however, the Project would replace an existing bridge and realign an existing roadway, which would not lead to increased human presence in hazardous areas. By addressing structural and hydraulic deficiencies of the existing bridge and improving the operational characteristics and geometrics of the bridge and roadway approaches, the Project would ultimately improve circulation in the Project area, thereby improving emergency response and evacuation along Gilman Springs Road and its surroundings. During construction of the Project, emergency response times could increase temporarily as a result of temporary lane closures, speed reductions, and the presence of construction personnel and equipment in the area. A TCP (see **SM TRA-1**) would be implemented to further maintain emergency access to the Project area and nearby properties.

To the extent that construction periods of the Project and related projects overlap, there is a potential for cumulative local-level emergency response time delays, including fire service. However, the related projects that could occur at the same time as the Project would not occur directly within the Project vicinity. Therefore, the Project would not contribute to a cumulative impact related to wildfire.

2.21.3 Avoidance, Minimization, and Mitigation Measures

No additional measures are needed beyond those identified under the individual resource discussions.

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4.2.20 Mandatory Findings of Significance

None.

4.2.21 Cumulative Impacts

None.

Appendix A Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACM	Asbestos Containing Material
ADL	Aerially Deposited Lead
ADT	average daily traffic
AMMs	avoidance and minimization measures
APE	Area of Potential Effects
ARL	Additional Reserve Land
AQMP	air quality management plan
ASR	Archaeological Survey Report
ASTM	American Society for Testing and Materials
Basin	South Coast Air Basin
Basin Plan	Water Quality Control Plan for the Santa Ana Basin
bgs	below the existing ground surface
BIR	Bridge Inspection Report
BMPs	best management practices
BSA	Biological Study Area
BTUs	British thermal units
BUOW	Burrowing Owl
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Cal-IPC	California Invasive Plant Council's
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CAPTAC	Comprehensive Agricultural Preserve Technical Advisory Committee
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CESA	California Endangered Species Act
CHLs	California Historic Landmarks
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide

Acronym/Abbreviation	Definition
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
Construction General Permit	NPDES General Permit for Construction Activities
County	Riverside Transportation Department
CR	Commercial Regional
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSC	California Species of Special Concern
CWA	Clean Water Act
dBA	A-weighted decibels
DBESP	Determination of Biologically Equivalent or Superior Preservation
DPP	design pollution prevention
DWR	Department of Water Resources
EIC	Eastern Information Center
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	environmentally sensitive area
FED	Final Environmental Document
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHSZ	Very High Fire Hazard Severity Zone
FIRM	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FRPP	Farm and Ranch Lands Protection Program
GHG	greenhouse gas
GSA	Groundwater Sustainability Agencies
GSPs)	groundwater sustainability plans
HBP	Highway Bridge Program
HMMP	Habitat Mitigation Monitoring Plan
HSC	Health and Safety Code
IEPR	Integrated Energy Policy Report
in/sec	inches per second
ISA	Initial Site Assessment
JPR	Joint Project Review
JSA	jurisdictional study area
LBP	Lead Based Paint
LCFS	Low Carbon Fuel Standard
LCP	Lead Compliance Plan
L_{eq}	equivalent noise level

Acronym/Abbreviation	Definition
LOD	limits of disturbance
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MLD	most likely descendant
MM	Mitigation Measure
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MS4 Permit	NPDES General Permit for Municipal Separate Storm Sewer Systems
MSHCP	Multiple Species Habitat Conservation Plan
MUA	mixed-use policy area
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NAHC	Native American Heritage Commission
NESMI	Natural Environment Study (Minimal Impacts)
NFIP	National Flood Insurance Program
NOI	notice of intent
NO_X	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
O_3	ozone
PCB	polychlorinated biphenyl
PFR	Preliminary Foundation Report
PM_{10}	particulate matter 10 micrometers or less in diameter
$PM_{2.5}$	particulate matter 2.5 micrometers or less in diameter
PMP	Paleontological Mitigation Plan
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1969
PPV	peak particle velocity
PQP	Public/Quasi-Public
PRC	Public Resources Code
PRIMP	paleontological resource impact mitigation program
RCA	Western Riverside County Regional Conservation Authority
RCRA	Resource Conservation and Recovery Act of 1976
RCTD	Riverside County Transportation Department
RECs	recognized environmental conditions
RM	rural mountainous
ROG	reactive organic gases
RWQCB	Regional Water Quality Control Board
SB	Senate Bill

Acronym/Abbreviation	Definition
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SFHA	special flood hazard areas
SGMA	Sustainable Groundwater Management Act of 2014
SI	Site Investigation
SIP	State Implementation Plan
SJVAP	San Jacinto Valley Area Plan
SJWA	San Jacinto Wildlife Area
SM	Standard Measure
SO_2	sulfur dioxide
SR	State Route
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TCP	Traffic Control Plan
TCR	tribal cultural resource
U.S.	United States
U.S.C.	United States Code
USACE	U.S Army Corps of Engineers
USDA	U.S. Department of Agriculture
VMT	Vehicles Miles Traveled
VOC	volatile organic compound
WDRs	Waste Discharge Requirements

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Gilman Springs Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Gilman Springs
Construction Start Date	1/2/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	22.4
Location	33.84318920088805, -116.99654899301153
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5574
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Bridge/Overpass Construction	0.10	Mile	0.92	0.00	—	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.67	7.28	62.6	71.6	0.14	2.89	3.37	6.26	2.66	0.48	3.14	—	15,908	15,908	0.64	0.19	3.88	15,986
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.63	7.26	62.7	70.4	0.14	2.89	3.37	6.26	2.66	0.48	3.14	—	15,838	15,838	0.64	0.19	0.10	15,912
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.78	4.02	35.0	39.2	0.08	1.56	1.95	3.51	1.44	0.28	1.72	—	8,937	8,937	0.36	0.11	0.98	8,980
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.87	0.73	6.39	7.15	0.01	0.29	0.36	0.64	0.26	0.05	0.31	—	1,480	1,480	0.06	0.02	0.16	1,487

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.67	7.28	62.6	71.6	0.14	2.89	3.37	6.26	2.66	0.48	3.14	—	15,908	15,908	0.64	0.19	3.88	15,986

2026	5.42	4.55	39.8	46.9	0.10	1.53	2.70	4.23	1.41	0.37	1.78	—	11,720	11,720	0.47	0.13	2.48	11,773
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.63	7.26	62.7	70.4	0.14	2.89	3.37	6.26	2.66	0.48	3.14	—	15,838	15,838	0.64	0.19	0.10	15,912
2026	5.41	4.54	39.8	46.1	0.10	1.53	2.70	4.23	1.41	0.37	1.78	—	11,669	11,669	0.46	0.13	0.06	11,719
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.78	4.02	35.0	39.2	0.08	1.56	1.95	3.51	1.44	0.28	1.72	—	8,937	8,937	0.36	0.11	0.98	8,980
2026	1.28	1.08	9.51	11.5	0.02	0.37	0.61	0.98	0.34	0.09	0.42	—	2,774	2,774	0.11	0.03	0.29	2,787
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.87	0.73	6.39	7.15	0.01	0.29	0.36	0.64	0.26	0.05	0.31	—	1,480	1,480	0.06	0.02	0.16	1,487
2026	0.23	0.20	1.74	2.09	< 0.005	0.07	0.11	0.18	0.06	0.02	0.08	—	459	459	0.02	0.01	0.05	461

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.76	6.35	0.01	0.28	—	0.28	0.26	—	0.26	—	876	876	0.04	0.01	—	879

Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.63	0.70	< 0.005	0.03	—	0.03	0.03	—	0.03	—	96.0	96.0	< 0.005	< 0.005	—	96.4
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.12	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	15.9	15.9	< 0.005	< 0.005	—	16.0
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.08	0.93	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	207	207	0.01	0.01	0.02	210

Vendor	0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.0	23.0	< 0.005	< 0.005	0.04	23.3
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.02	14.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	0.01	3.86
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.22	2.22	< 0.005	< 0.005	< 0.005	2.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Linear, Grading & Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.33	7.00	62.0	66.7	0.14	2.89	—	2.89	2.65	—	2.65	—	14,759	14,759	0.60	0.12	—	14,810
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	8.33	7.00	62.0	66.7	0.14	2.89	—	2.89	2.65	—	2.65	—	14,759	14,759	0.60	0.12	—	14,810
Dust From Material Movement	—	—	—	—	—	—	2.48	2.48	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	3.60	3.03	26.9	28.9	0.06	1.25	—	1.25	1.15	—	1.15	—	6,389	6,389	0.26	0.05	—	6,411
Dust From Material Movement	—	—	—	—	—	—	1.07	1.07	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.66	0.55	4.90	5.27	0.01	0.23	—	0.23	0.21	—	0.21	—	1,058	1,058	0.04	0.01	—	1,061
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33	0.28	0.27	4.79	0.00	0.00	0.81	0.81	0.00	0.19	0.19	—	874	874	0.04	0.03	3.21	887
Vendor	0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.35	128

Hauling	0.01	< 0.005	0.17	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	0.33	160
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.26	0.30	3.62	0.00	0.00	0.81	0.81	0.00	0.19	0.19	—	803	803	0.04	0.03	0.08	813
Vendor	0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	128
Hauling	0.01	< 0.005	0.18	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	153	153	< 0.005	0.02	0.01	160
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.14	1.66	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	352	352	0.02	0.01	0.60	357
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	53.0	53.0	< 0.005	0.01	0.07	55.5
Hauling	< 0.005	< 0.005	0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.1	66.1	< 0.005	0.01	0.06	69.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.30	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.3	58.3	< 0.005	< 0.005	0.10	59.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.77	8.77	< 0.005	< 0.005	0.01	9.19
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.5

3.5. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.46	4.58	42.9	44.1	0.10	1.69	—	1.69	1.56	—	1.56	—	10,963	10,963	0.44	0.09	—	11,001

Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.14	7.34	0.02	0.28	—	0.28	0.26	—	0.26	—	1,824	1,824	0.07	0.01	—	1,830
Dust From Material Movement	—	—	—	—	—	—	0.34	0.34	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.30	1.34	< 0.005	0.05	—	0.05	0.05	—	0.05	—	302	302	0.01	< 0.005	—	303
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.22	2.68	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	596	596	0.03	0.02	0.06	604

Vendor	0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	122	122	< 0.005	0.02	0.01	128
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.04	0.47	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	100	100	< 0.005	< 0.005	0.17	102
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.4	20.4	< 0.005	< 0.005	0.03	21.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	0.03	16.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.37	3.37	< 0.005	< 0.005	< 0.005	3.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Linear, Drainage, Utilities, & Sub-Grade (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.19	4.36	39.4	43.5	0.10	1.53	—	1.53	1.40	—	1.40	—	10,965	10,965	0.44	0.09	—	11,002
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	5.19	4.36	39.4	43.5	0.10	1.53	—	1.53	1.40	—	1.40	—	10,965	10,965	0.44	0.09	—	11,002
Dust From Material Movement	—	—	—	—	—	—	2.07	2.07	—	0.22	0.22	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.12	0.94	8.49	9.37	0.02	0.33	—	0.33	0.30	—	0.30	—	2,360	2,360	0.10	0.02	—	2,368
Dust From Material Movement	—	—	—	—	—	—	0.45	0.45	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.20	0.17	1.55	1.71	< 0.005	0.06	—	0.06	0.06	—	0.06	—	391	391	0.02	< 0.005	—	392
Dust From Material Movement	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.18	3.30	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	634	634	0.03	0.02	2.15	644
Vendor	0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.33	126

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.21	0.18	0.20	2.50	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	583	583	0.01	0.02	0.06	590
Vendor	0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.05	0.56	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.20	129
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.9	25.9	< 0.005	< 0.005	0.03	27.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.1	21.1	< 0.005	< 0.005	0.03	21.3
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Linear, Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.63	8.79	0.01	0.23	—	0.23	0.21	—	0.21	—	1,336	1,336	0.05	0.01	—	1,341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.91	1.42	< 0.005	0.04	—	0.04	0.03	—	0.03	—	216	216	0.01	< 0.005	—	217
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	35.8	35.8	< 0.005	< 0.005	—	35.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.86	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	165	165	0.01	0.01	0.56	168
Vendor	0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	120	120	< 0.005	0.02	0.33	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.9	24.9	< 0.005	< 0.005	0.04	25.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.5	19.5	< 0.005	< 0.005	0.02	20.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.12	4.12	< 0.005	< 0.005	0.01	4.18
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.22	3.22	< 0.005	< 0.005	< 0.005	3.38
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/2/2025	2/27/2025	5.00	40.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	2/28/2025	10/7/2025	5.00	158	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	10/8/2025	4/20/2026	5.00	139	—
Linear, Paving	Linear, Paving	4/21/2026	7/12/2026	5.00	59.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Linear, Grading & Excavation	Cranes	Diesel	Average	1.00	8.00	367	0.29
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	4.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	2.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	3.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	4.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Grading & Excavation	Other Construction Equipment	Diesel	Average	4.00	8.00	82.0	0.42
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	2.00	8.00	148	0.41

Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	4.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Bore/Drill Rigs	Diesel	Average	2.00	8.00	83.0	0.50
Linear, Drainage, Utilities, & Sub-Grade	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	16.0	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	4.00	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT

Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	62.0	18.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	4.00	10.2	HHDT,MHDT
Linear, Grading & Excavation	Hauling	2.22	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	46.0	18.5	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	4.00	10.2	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	12.0	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	4.00	10.2	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00	0.00	0.92	0.00	—
Linear, Grading & Excavation	500	2,300	0.92	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	0.00	0.00	0.92	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Bridge/Overpass Construction	0.92	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	117	532	0.03	< 0.005
2026	58.7	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.4	annual days of extreme heat
Extreme Precipitation	4.20	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.2	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.1
AQ-PM	35.8
AQ-DPM	7.39
Drinking Water	8.44
Lead Risk Housing	26.6
Pesticides	86.2
Toxic Releases	21.5
Traffic	28.0
Effect Indicators	—
CleanUp Sites	29.4
Groundwater	54.7
Haz Waste Facilities/Generators	72.0
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	50.9

Cardio-vascular	70.4
Low Birth Weights	27.1
Socioeconomic Factor Indicators	—
Education	56.5
Housing	38.1
Linguistic	45.4
Poverty	74.0
Unemployment	88.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	35.91684845
Employed	23.88040549
Median HI	37.71333248
Education	—
Bachelor's or higher	21.19851148
High school enrollment	100
Preschool enrollment	28.57692801
Transportation	—
Auto Access	29.34684974
Active commuting	78.80148852
Social	—
2-parent households	47.46567432
Voting	31.05350956
Neighborhood	—
Alcohol availability	80.43115617

Park access	9.49570127
Retail density	10.65058386
Supermarket access	31.15616579
Tree canopy	1.270370846
Housing	—
Homeownership	74.72090337
Housing habitability	74.33594251
Low-inc homeowner severe housing cost burden	46.54176825
Low-inc renter severe housing cost burden	54.83125882
Uncrowded housing	63.4800462
Health Outcomes	—
Insured adults	31.56679071
Arthritis	0.0
Asthma ER Admissions	38.8
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	34.9
Cognitively Disabled	21.0
Physically Disabled	9.6
Heart Attack ER Admissions	14.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	81.4

Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	7.8
SLR Inundation Area	0.0
Children	47.4
Elderly	16.0
English Speaking	45.6
Foreign-born	42.9
Outdoor Workers	16.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	83.4
Traffic Density	25.7
Traffic Access	23.0
Other Indices	—
Hardship	55.8
Other Decision Support	—
2016 Voting	41.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	49.0
Healthy Places Index Score for Project Location (b)	33.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Demolition	removal of existing bridge
Construction: Architectural Coatings	paving new bridge
Construction: Off-Road Equipment	default plus additional equipment
Construction: Trips and VMT	added water trucks and rounded

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Gilman Springs
Construction Start Date	1/2/2025
Lead Agency	
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.5
Precipitation (days)	22.4
Location	33.84318920088805, -116.99654899301153
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5574
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Bridge/Overpass Construction	0.1	Mile	0.92	0				

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.		8.67	7.28	62.6	71.6	0.14	2.89	3.37	6.26	2.66	0.48	3.14	15908	15908	0.64	0.19	3.88	15986
Daily, Winter (Max)																		
Unmit.		8.63	7.26	62.7	70.4	0.14	2.89	3.37	6.26	2.66	0.48	3.14	15838	15838	0.64	0.19	0.1	15912
Average Daily (Max)																		
Unmit.		4.78	4.02	35	39.2	0.08	1.56	1.95	3.51	1.44	0.28	1.72	8937	8937	0.36	0.11	0.98	8980
Annual (Max)																		
Unmit.		0.87	0.73	6.39	7.15	0.01	0.29	0.36	0.64	0.26	0.05	0.31	1480	1480	0.06	0.02	0.16	1487

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2025		8.67	7.28	62.6	71.6	0.14	2.89	3.37	6.26	2.66	0.48	3.14	15908	15908	0.64	0.19	3.88	15986
2026		5.42	4.55	39.8	46.9	0.1	1.53	2.7	4.23	1.41	0.37	1.78	11720	11720	0.47	0.13	2.48	11773
Daily - Winter (Max)																		
2025		8.63	7.26	62.7	70.4	0.14	2.89	3.37	6.26	2.66	0.48	3.14	15838	15838	0.64	0.19	0.1	15912
2026		5.41	4.54	39.8	46.1	0.1	1.53	2.7	4.23	1.41	0.37	1.78	11669	11669	0.46	0.13	0.06	11719
Average Daily																		
2025		4.78	4.02	35	39.2	0.08	1.56	1.95	3.51	1.44	0.28	1.72	8937	8937	0.36	0.11	0.98	8980
2026		1.28	1.08	9.51	11.5	0.02	0.37	0.61	0.98	0.34	0.09	0.42	2774	2774	0.11	0.03	0.29	2787
Annual																		
2025		0.87	0.73	6.39	7.15	0.01	0.29	0.36	0.64	0.26	0.05	0.31	1480	1480	0.06	0.02	0.16	1487
2026		0.23	0.2	1.74	2.09	< 0.005	0.07	0.11	0.18	0.06	0.02	0.08	459	459	0.02	0.01	0.05	461
Total																		1948

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Equipment		0.8	0.67	5.76	6.35	0.01	0.28		0.28	0.26		0.26		876	876	0.04	0.01		879
Dust From Material Movement								0.21	0.21		0.02	0.02						
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment		0.09	0.07	0.63	0.7	< 0.005	0.03		0.03	0.03		0.03		96	96	< 0.005	< 0.005		96.4
Dust From Material Movement								0.02	0.02		< 0.005	< 0.005						
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment		0.02	0.01	0.12	0.13	< 0.005	0.01		0.01	0.01		0.01		15.9	15.9	< 0.005	< 0.005		16
Dust From Material Movement								< 0.005	< 0.005		< 0.005	< 0.005						
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Total onsite daily average (lbs/day)		0.09	0.07	0.63	0.7	0	0.03	0.02	0.05	0.03	0	0.03	0	96	96	0	0	0	96.4
daily max (winter)		0.8	0.67	5.76	6.35	0.01	0.28	0.21	0.49	0.26	0.02	0.28	0	876	876	0.04	0.01	0	879
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker		0.08	0.07	0.08	0.93	0	0	0.21	0.21	0	0.05	0.05		207	207	0.01	0.01	0.02	210
Vendor		0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		122	122	< 0.005	0.02	0.01	128
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker		0.01	0.01	0.01	0.11	0	0	0.02	0.02	0	0.01	0.01		23	23	< 0.005	< 0.005	0.04	23.3
Vendor	< 0.005	< 0.005		0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		13.4	13.4	< 0.005	< 0.005	0.02	14
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005		0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.81	3.81	< 0.005	< 0.005	0.01	3.86
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		2.22	2.22	< 0.005	< 0.005	< 0.005	2.33
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite +Onsite vendor trucks																			2.33
offsite + onsite equipment																			16
offsite +onsite worker																			3.86

3.3. Linear, Grading & Excavation (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment		8.33	7	62	66.7	0.14	2.89		2.89	2.65		2.65		14759	14759	0.6	0.12		14810
Dust From Material Movement								2.48	2.48		0.27	0.27						
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Equipment		8.33	7	62	66.7	0.14	2.89		2.89	2.65		2.65		14759	14759	0.6	0.12		14810
Dust From Material Movement								2.48	2.48		0.27	0.27						
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment		3.6	3.03	26.9	28.9	0.06	1.25		1.25	1.15		1.15		6389	6389	0.26	0.05		6411
Dust From Material Movement								1.07	1.07		0.12	0.12						
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment		0.66	0.55	4.9	5.27	0.01	0.23		0.23	0.21		0.21		1058	1058	0.04	0.01		1061
Dust From Material Movement								0.2	0.2		0.02	0.02						
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
total onsite daily average		3.6	3.03	26.9	28.9	0.06	1.25	1.07	2.32	1.15	0.12	1.27							
daily winter max		8.33	7	62	66.7	0.14	2.89	2.48	5.37	2.65	0.27	2.92							
Offsite																		
Daily, Summer (Max)																		
Worker		0.33	0.28	0.27	4.79	0	0	0.81	0.81	0	0.19	0.19		874	874	0.04	0.03	3.21	887
Vendor		0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		122	122	< 0.005	0.02	0.35	128
Hauling		0.01	< 0.005	0.17	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01		153	153	< 0.005	0.02	0.33	160
Daily, Winter (Max)																		
Worker		0.29	0.26	0.3	3.62	0	0	0.81	0.81	0	0.19	0.19		803	803	0.04	0.03	0.08	813
Vendor		0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		122	122	< 0.005	0.02	0.01	128
Hauling		0.01	< 0.005	0.18	0.04	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01		153	153	< 0.005	0.02	0.01	160
Average Daily																		
Worker		0.13	0.11	0.14	1.66	0	0	0.35	0.35	0	0.08	0.08		352	352	0.02	0.01	0.6	357
Vendor	< 0.005	< 0.005		0.06	0.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005		53	53	< 0.005	0.01	0.07	55.5
Hauling	< 0.005	< 0.005		0.08	0.02	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01		66.1	66.1	< 0.005	0.01	0.06	69.3
Annual																		
Worker		0.02	0.02	0.03	0.3	0	0	0.06	0.06	0	0.01	0.01		58.3	58.3	< 0.005	< 0.005	0.1	59.1
Vendor	< 0.005	< 0.005		0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		8.77	8.77	< 0.005	< 0.005	0.01	9.19
Hauling	< 0.005	< 0.005		0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		10.9	10.9	< 0.005	< 0.005	0.01	11.5

3.5. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Equipment		5.46	4.58	42.9	44.1	0.1	1.69		1.69	1.56		1.56		10963	10963	0.44	0.09		11001
Dust From Material Movement								2.07	2.07		0.22	0.22							
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																			
Off-Road Equipment		0.91	0.76	7.14	7.34	0.02	0.28		0.28	0.26		0.26		1824	1824	0.07	0.01		1830
Dust From Material Movement								0.34	0.34		0.04	0.04							
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																			
Off-Road Equipment		0.17	0.14	1.3	1.34	< 0.005	0.05		0.05	0.05		0.05		302	302	0.01	< 0.005		303
Dust From Material Movement								0.06	0.06		0.01	0.01							
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
total onsite daily average		0.91	0.76	7.14	7.34	0.02	0.28	0.34	0.62	0.26	0.04	0.3							
daily winter max		5.46	4.58	42.9	44.1	0.1	1.69	2.07	3.76	1.56	0.22	1.78							
Offsite																			
Daily, Summer (Max)																			
Daily, Winter (Max)																			
Worker		0.22	0.19	0.22	2.68	0	0	0.6	0.6	0	0.14	0.14		596	596	0.03	0.02	0.06	604
Vendor		0.01	< 0.005	0.14	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		122	122	< 0.005	0.02	0.01	128
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																			
Worker		0.04	0.03	0.04	0.47	0	0	0.1	0.1	0	0.02	0.02		100	100	< 0.005	< 0.005	0.17	102
Vendor	< 0.005	< 0.005		0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005		20.4	20.4	< 0.005	< 0.005	0.03	21.3
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																			
Worker		0.01	0.01	0.01	0.09	0	0	0.02	0.02	0	< 0.005	< 0.005		16.6	16.6	< 0.005	< 0.005	0.03	16.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		3.37	3.37	< 0.005	< 0.005	< 0.005	3.53
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Linear, Drainage, Utilities, & Sub-Grade (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment		5.19	4.36	39.4	43.5	0.1	1.53		1.53	1.4		1.4		10965	10965	0.44	0.09		11002
Dust From Material Movement								2.07	2.07		0.22	0.22							
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																			
Off-Road Equipment		5.19	4.36	39.4	43.5	0.1	1.53		1.53	1.4		1.4		10965	10965	0.44	0.09		11002
Dust From Material Movement								2.07	2.07		0.22	0.22							
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																			
Off-Road Equipment		1.12	0.94	8.49	9.37	0.02	0.33		0.33	0.3		0.3		2360	2360	0.1	0.02		2368
Dust From Material Movement								0.45	0.45		0.05	0.05							
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																			
Off-Road Equipment		0.2	0.17	1.55	1.71	< 0.005	0.06		0.06	0.06		0.06		391	391	0.02	< 0.005		392
Dust From Material Movement								0.08	0.08		0.01	0.01							
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
total onsite daily average		1.12	0.94	8.49	9.37	0.02	0.33	0.45	0.78	0.3	0.05	0.35	0	2360	2360	0.1	0.02	0	2368
daily winter max		5.19	4.36	39.4	43.5	0.1	1.53	2.07	3.6	1.4	0.22	1.62	0	10965	10965	0.44	0.09	0	11002
Offsite																			
Daily, Summer (Max)																			
Worker		0.22	0.19	0.18	3.3	0	0	0.6	0.6	0	0.14	0.14		634	634	0.03	0.02	2.15	644
Vendor		0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		120	120	< 0.005	0.02	0.33	126
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																			
Worker		0.21	0.18	0.2	2.5	0	0	0.6	0.6	0	0.14	0.14		583	583	0.01	0.02	0.06	590
Vendor		0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		120	120	< 0.005	0.02	0.01	126
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																			
Worker		0.04	0.04	0.05	0.56	0	0	0.13	0.13	0	0.03	0.03		127	127	< 0.005	< 0.005	0.2	129
Vendor	< 0.005	< 0.005		0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005		25.9	25.9	< 0.005	< 0.005	0.03	27.2
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																			
Worker		0.01	0.01	0.01	0.1	0	0	0.02	0.02	0	0.01	0.01		21.1	21.1	< 0.005	< 0.005	0.03	21.3
Vendor	< 0.005	< 0.005		0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		4.29	4.29	< 0.005	< 0.005	0.01	4.5
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.9. Linear, Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment		0.69	0.58	5.63	8.79	0.01	0.23		0.23	0.21		0.21		1336	1336	0.05	0.01		1341
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																			
Average Daily																			
Off-Road Equipment		0.11	0.09	0.91	1.42	< 0.005	0.04		0.04	0.03		0.03		216	216	0.01	< 0.005		217
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																			
Off-Road Equipment		0.02	0.02	0.17	0.26	< 0.005	0.01		0.01	0.01		0.01		35.8	35.8	< 0.005	< 0.005		35.9
Onsite truck		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
total onsite daily average		0.11	0.09	0.91	1.42	0	0.04	0	0.04	0.03	0	0.03	0	216	216	0.01	0	0	217
daily winter max		0.69	0.58	5.63	8.79	0.01	0.23	0	0.23	0.21	0	0.21	0	1336	1336	0.05	0.01	0	1341
Offsite																			
Daily, Summer (Max)																			
Worker		0.06	0.05	0.05	0.86	0	0	0.16	0.16	0	0.04	0.04		165	165	0.01	0.01	0.56	168
Vendor		0.01	< 0.005	0.13	0.04	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01		120	120	< 0.005	0.02	0.33	126
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																			
Average Daily																			
Worker		0.01	0.01	0.01	0.11	0	0	0.02	0.02	0	0.01	0.01		24.9	24.9	< 0.005	< 0.005	0.04	25.2
Vendor	< 0.005	< 0.005		0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005		19.5	19.5	< 0.005	< 0.005	0.02	20.4
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																			
Worker	< 0.005	< 0.005	< 0.005		0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		4.12	4.12	< 0.005	< 0.005	0.01	4.18
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		3.22	3.22	< 0.005	< 0.005	< 0.005	3.38
Hauling		0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
2025 total onsite daily max		14.59	12.25	110.66	117.15	0.25	4.86	4.76	9.62	4.47	0.51	4.98	0	876	876	0.04	0.01	0	879
2026 total onsite avg daily		1.23	1.03	9.4	10.79	0.02	0.37	0.45	0.82	0.33	0.05	0.38	0	2576	2576	0.11	0.02	0	2585
2026 total onsite daily max		5.88	4.94	45.03	52.29	0.11	1.76	2.07	3.83	1.61	0.22	1.83	0	12301	12301	0.49	0.1	0	12343

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Daily, Winter (Max)																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		
Annual																		
Avoided																		
Subtotal																		
Sequestered																		
Subtotal																		
Removed																		
Subtotal																		

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per I	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/2/2025	2/27/2025	5	40	
Linear, Grading & Excavation	Linear, Grading & Excavation	2/28/2025	10/7/2025	5	158	
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	10/8/2025	4/20/2026	5	139	
Linear, Paving	Linear, Paving	4/21/2026	7/12/2026	5	59	

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Average	1	8	87	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	2	8	36	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	2	8	6	0.82
Linear, Grubbing & Land Clearing	Concrete/Industrial Saws	Diesel	Average	1	8	33	0.73
Linear, Grading & Excavation	Cranes	Diesel	Average	1	8	367	0.29
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	2	8	87	0.43
Linear, Grading & Excavation	Excavators	Diesel	Average	4	8	36	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	2	8	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Average	3	8	36	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	3	8	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Average	4	8	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	0	8	6	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37
Linear, Grading & Excavation	Other Construction Equipment	Diesel	Average	4	8	82	0.42
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1	8	37	0.48
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1	8	14	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	2	8	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1	8	8	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1	8	11	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1	8	96	0.4
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	4	8	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	2	8	6	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37
Linear, Drainage, Utilities, & Sub-Grade	Bore/Drill Rigs	Diesel	Average	2	8	83	0.5
Linear, Drainage, Utilities, & Sub-Grade	Aerial Lifts	Diesel	Average	1	8	46	0.31
Linear, Paving	Pavers	Diesel	Average	1	8	81	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1	8	89	0.36
Linear, Paving	Rollers	Diesel	Average	1	8	36	0.38
Linear, Paving	Signal Boards	Electric	Average	0	8	6	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Average	2	8	84	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing				
Linear, Grubbing & Land Clearing	Worker	16	18.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	4	10.2	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0	20	HHDT
Linear, Grubbing & Land Clearing	Onsite truck			HHDT
Linear, Grading & Excavation				
Linear, Grading & Excavation	Worker	62	18.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	4	10.2	HHDT,MHDT
Linear, Grading & Excavation	Hauling	2.22	20	HHDT
Linear, Grading & Excavation	Onsite truck			HHDT
Linear, Drainage, Utilities, & Sub-Grade				
Linear, Drainage, Utilities, & Sub-Grade	Worker	46	18.5	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	4	10.2	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0	20	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck			HHDT
Linear, Paving				
Linear, Paving	Worker	12	18.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	4	10.2	HHDT,MHDT
Linear, Paving	Hauling	0	20	HHDT
Linear, Paving	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0	0	0.92	0	
Linear, Grading & Excavation	500	2300	0.92	0	
Linear, Drainage, Utilities, & Sub-Grade	0	0	0.92	0	

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61	61
Water Demolished Area	2	36	36

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Bridge/Overpass Construction	0.92	100

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Year	CO2	CH4	N2O
2025	117	532	0.03	< 0.005
2026	58.7	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (k	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report
6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.4	annual days of extreme heat
Extreme Precipitation	4.2	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	18.2	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score	
Temperature and Extreme Heat		3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A	
Sea Level Rise		1	1	1	2
Wildfire		1	1	1	2
Flooding	N/A	N/A	N/A	N/A	
Drought	N/A	N/A	N/A	N/A	
Snowpack Reduction	N/A	N/A	N/A	N/A	
Air Quality Degradation		1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures
7. Health and Equity Details
7.1. CalEnviroScreen 4.0 Scores
The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	
AQ-Ozone	97.1
AQ-PM	35.8
AQ-DPM	7.39
Drinking Water	8.44
Lead Risk Housing	26.6
Pesticides	86.2
Toxic Releases	21.5
Traffic	28
Effect Indicators	
CleanUp Sites	29.4
Groundwater	54.7
Haz Waste Facilities/Generators	72
Impaired Water Bodies	0
Solid Waste	0
Sensitive Population	
Asthma	50.9
Cardio-vascular	70.4
Low Birth Weights	27.1
Socioeconomic Factor Indicators	
Education	56.5
Housing	38.1
Linguistic	45.4
Poverty	74
Unemployment	88.7

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	
Above Poverty	35.91684845
Employed	23.88040549
Median HI	37.71333248
Education	
Bachelor's or higher	21.19851148
High school enrollment	100
Preschool enrollment	28.57692801
Transportation	
Auto Access	29.34684974
Active commuting	78.80148852
Social	
2-parent households	47.46567432
Voting	31.05350956
Neighborhood	
Alcohol availability	80.43115617
Park access	9.49570127
Retail density	10.65058386
Supermarket access	31.15616579
Tree canopy	1.270370846
Housing	
Homeownership	74.72090337
Housing habitability	74.33594251
Low-inc homeowner severe housing cost burden	46.54176825
Low-inc renter severe housing cost burden	54.83125882
Uncrowded housing	63.4800462
Health Outcomes	
Insured adults	31.56679071
Arthritis	0
Asthma ER Admissions	39
High Blood Pressure	0
Cancer (excluding skin)	0
Asthma	0
Coronary Heart Disease	0
Chronic Obstructive Pulmonary Disease	0
Diagnosed Diabetes	0
Life Expectancy at Birth	35
Cognitively Disabled	21
Physically Disabled	9.6
Heart Attack ER Admissions	14
Mental Health Not Good	0
Chronic Kidney Disease	0
Obesity	0
Pedestrian Injuries	81
Physical Health Not Good	0
Stroke	0
Health Risk Behaviors	
Binge Drinking	0
Current Smoker	0
No Leisure Time for Physical Activity	0
Climate Change Exposures	
Wildfire Risk	7.8
SLR Inundation Area	0
Children	47
Elderly	16
English Speaking	46
Foreign-born	43
Outdoor Workers	16
Climate Change Adaptive Capacity	
Impervious Surface Cover	83
Traffic Density	26
Traffic Access	23
Other Indices	
Hardship	56
Other Decision Support	
2016 Voting	41

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	49
Healthy Places Index Score for Project Location (b)	33
Project Located in a Designated Disadvantaged Comm	No
Project Located in a Low-Income Community (Assemt	No
Project Located in a Community Air Protection Progra	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

Measure Title	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of Applicable Measures	Total Points Earned	Max Possible Points	Weighted Score

7.6. Health & Equity Custom Measures

Measure Title	Sponsor

8. User Changes to Default Data

Screen	Justification
Construction: Demolition	removal of existing bridge
Construction: Architectural Coatings	paving new bridge
Construction: Off-Road Equipment	default plus additional equipment
Construction: Trips and VMT	added water trucks and rounded

Energy Use for 2025

Energy Consumption (BTU per Year)

		MTCO2e	kwh/hr	kbtu/yr	BTU/yr	MMBTU/yr
Construction	Trucks	15.0500			450,735,203	451
	Workers	79.8600			2,506,565,526	2,507
	Equipment	1,380.0000			41,329,872,435	41,330
Operations	Mobile				0	0
	Electricity				0	0
	Natural Gas				0	0
Construction Total	-	149	0	0	44,287,173,164	44,287
Operations Total	-	0	0	0	0	0
Overall Total	-	149	0	0	44,287,173,164	44,287

	Gallons
100% diesel	*3,250*
100% gasoline	*20,053*
100% diesel	*297,980*
100% gasoline	-

Conversions		**Source**
BTU_kWh	3,412	BTS 2021
BTU/1 gallon gasoline	125,000	BTS 2021
BTU/1 gallon diesel	138,700	BTS 2021
kg CO2 per gal diesel	10.21	EPA 2021 EF Hub
kg CO2 per gal gasoline	8.78	EPA 2021 EF Hub
kgs per MT, btu per kbtu	1000	Standard
BTU per MMBTU	1,000,000	Standard
mt/lbs	0.00045359	Standard

https://www.bts.gov/content/energy-consumption-mode-transportation#:~:text=Jet%20fuel%20%3D%20135%2C000%20Btu%2Fgallon.
https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf

Energy Use for 2026

Energy Consumption (BTU per Year)

		MTCO2e	kwh/hr	kbtu/yr	BTU/yr	MMBTU/yr
Construction	Trucks	7.8800			235,999,561	236
	Workers	25.4800			799,740,666	800
	Equipment	427.9000			12,815,255,373	12,815
Operations	Mobile				0	0
	Electricity				0	0
	Natural Gas				0	0
Construction Total	-	149	0	0	13,850,995,601	13,851
Operations Total	-	0	0	0	0	0
Overall Total	-	149	0	0	13,850,995,601	13,851

	Gallons
100% diesel	*1,702*
100% gasoline	*6,398*
100% diesel	*92,395*
100% gasoline	-

Conversions		**Source**
BTU_kWh	3,412	BTS 2021
BTU/1 gallon gasoline	125,000	BTS 2021
BTU/1 gallon diesel	138,700	BTS 2021
kg CO2 per gal diesel	10.21	EPA 2021 EF Hub
kg CO2 per gal gasoline	8.78	EPA 2021 EF Hub
kgs per MT, btu per kbtu	1000	Standard
BTU per MMBTU	1,000,000	Standard
mt/lbs	0.00045359	Standard

https://www.bts.gov/content/energy-consumption-mode-transportation#:~:text=Jet%20fuel%20%3D%20135%2C000%20Btu%2Fgallon.
https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf

SDGE Rate Calc

https://sdforward.com/docs/default-source/final-2021-regional-plan/appendix-x---2016-greenhouse-gas-emissions-inventory-and-projections.pdf?sfvrsn=c4c1fd65_2

	lbs/mWH	RPS%
2016	527	43.0%
2025	493	47.0%
2030	370	60%
2035	249	73%
2045	0	100%
2050	0	100%

linear interpolation for other analysis years

2024	497	46.6%

Table X.11: Key Inputs and 2016 Greenhouse Gas Emissions from Electricity

Key Inputs and 2016 Greenhouse Gas Emissions from Electricity

Electricity Sales – Bundled (MWh)	14,482,332
Electricity Sales – Direct Access (MWh)	3,360,561
Transmission and Distribution Loss Factor	1.082
SDG&E Electricity Emission Factor (lbs CO_2e/MWh)	527
Direct Access Electricity Emission Factor (lbs CO_2e/MWh)	836
GHG Emissions (MT CO_2e)	5,121,950
GHG Emissions Associated with Electricity for Water Treatment – Excluded (MT CO_2e)	–58,925
GHG Emissions Associated with Natural Gas Used at On-Site Self-Serve Electric Generation – Added (MT CO_2e)	204,014
GHG Emissions (MT CO_2e)	5,267,039
GHG Emissions (MMT CO_2e)	**5.3**

Source: CEC 2020; SDG&E 2018; EPIC, USD 2020.

Projected Renewable or Greenhouse Gas–Free Content and Emission Factors of Retail Electricity Providers

Retail Electricity Provider	2025	2030	2035	2045	2050
Projected Renewable or GHG-Free Content (%)*					
San Diego Community Power	67%	100%	100%	100%	100%
SDG&E Bundled and Clean Energy Alliance	47%	60%	73%	100%	100%
ESPs for Direct Access	47%	60%	73%	100%	100%
Projected Electricity Emission Factor (lbs CO_2e/MWh)**					
San Diego Community Power	308	—	—	—	—
SDG&E Bundled and Clean Energy Alliance	493	370	249	—	—
ESPs for Direct Access	493	370	249	—	—

* Based on SB 100 RPS targets and CCE programs' implementation plans.

** Calculated based on 2016 SDG&E bundled electricity emission factor of 527 lbs CO_2e/MWh and 43% renewable provided in its 2018 Power Source Disclosure.

Source: EPIC, USD 2020.

https://www.energy.ca.gov/filebrowser/download/527

2016 POWER CONTENT LABEL
San Diego Gas & Electric

ENERGY RESOURCES	2016 SDG&E Power Mix	2016 SDG&E EcoChoice Mix	2016 CA Power Mix**
Eligible Renewable	**43%**	**100%**	**25%**
Biomass & biowaste	1%		2%
Geothermal	0%		4%
Eligible hydroelectric	0%		2%
Solar	21%	100%	8%
Wind	21%		9%
Coal	**0%**		**4%**
Large Hydroelectric	**0%**		**10%**
Natural Gas	**42%**		**37%**
Nuclear	**0%**		**9%**
Other	**0%**		**0%**
Unspecified sources of power*	**15%**		**15%**
TOTAL	**100%**	**100%**	**100%**

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources.

** Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.

For specific information about this electricity product, contact:	**San Diego Gas & Electric** **800-411-7343**
For general information about the Power Content Label, contact the California Energy Commission at:	California Energy Commission 844-421-6229 http://www.energy.ca.gov/pcl/

Year 2025

Phase	Annual Emissions (CO2e/yr)		
	Vendor trucks*	Worker	Equipment
3.1. Linear, Grubbing & Land Clearing (2025) - Unmitigated	2.33	3.86	16
3.3. Linear, Grading & Excavation (2025) - Unmitigated	9.19	59.1	1061
3.5. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated	3.53	16.9	303
Total 2025 annual tons (MT CO2e)	**15.05**	**79.86**	**1380**

*no on-site truck emissions

Year 2026

Phase	Annual Emissions (CO2e/yr)		
	Vendor trucks*	Worker	Equipment
3.7. Linear, Drainage, Utilities, & Sub-Grade (2026) - Unmitigated	4.5	21.3	392
3.9. Linear, Paving (2026) - Unmitigated	3.38	4.18	35.9
Total 2026 annual tons (MT CO2e)	**7.88**	**25.48**	**427.9**

Energy totals for 2025 and 2026 Project Construction

	million BTU	Diesel gallons
2025	44,287	3,205
2026	13,851	1,702
Total	**58,138**	**4,907**

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Appendix C Mitigation Monitoring and Reporting Program

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Permit Type	Agency	Date Received	Expiration	Notes
Section 401 Water Quality Certification	Regional Water Quality Control Board (RWQCB)			
Section 404 Nationwide Permit	U.S Army Corps of Engineers (USACE)			
Section 1602 Streambed Alteration Agreement	California Department of Fish and Wildlife (CDFW)			

Date: (6/4/2026) Project
Phase: 1
☒ **PA&ED**
☐ **PS&E**
☐ **Construction**

MITIGATION MONITORING AND REPORTING PROGRAM (Gilman Springs Road Bridge Replacement Project)

Avoidance, Minimization, and/or Mitigation Measures	Source	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
										YES	NO
Aesthetics											
SM VIS-1. During construction, the construction contractor shall minimize tree and vegetation removals to the extent practicable.	Section 2.1.3 IS/MND	IS/MND, Section 2.1.3	Contractor	Construction							
SM VIS-2. During construction, the construction contractor shall ensure contour grading that integrates with the natural terrain to the extent feasible.	Section 2.1.3 IS/MND	IS/MND, Section 2.1.3	Contractor	Construction							
SM VIS-3. Post-construction, the construction contractor shall hydroseed disturbed areas, including staging areas and the section of road that is removed, with a seed mix that includes native species. Under no circumstances shall invasive plant species be used in any erosion control measures.	Section 2.1.3 IS/MND	IS/MND, Section 2.1.3	Contractor	Post-Construction							
SM VIS-4. During construction, the construction contractor shall minimize fugitive light from portable sources used during construction.	Section 2.1.3 IS/MND	IS/MND, Section 2.1.3	Contractor	Construction							
Air Quality											
SM AQ-1. During clearing, grading, earthmoving, or excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur as required by SCAQMD and the County, with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in Project specifications. Visible dust beyond the property line emanating from the Project will be prevented to the maximum extent feasible.	Section 2.3.3 IS/MND	IS/MND, Section 2.3.3	Contractor	Construction							

Date: (6/4/2026) Project
Phase: 1
☒ **PA&ED**
☐ **PS&E**
☐ **Construction**

MITIGATION MONITORING AND REPORTING PROGRAM (Gilman Springs Road Bridge Replacement Project)

Avoidance, Minimization, and/or Mitigation Measures	Source	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure	Measure Completed (Date and Initials)		Remarks	Environmental Compliance	
										YES	NO
Biological Resources											
AMM BIO-1, Vegetation Clearing Restrictions. Clearing of natural vegetation (including sage scrub) will be performed outside of the active breeding season for birds, as defined in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) (March 1 through June 30) (MSHCP Volume I, Section 7.5.3), except for Riversidian sage scrub habitat judged to be potentially suitable and/or occupied by coastal California gnatcatcher and located within MSHCP Criteria Area and Additional Reserve Lands (ARL). For these areas, the habitat removal restriction is extended from June 30 to August 30. Should protocol surveys not be performed to demonstrate coastal California gnatcatcher, and if the contractor is unable to abide by the March 1 to August 30 restriction, all project related actions in the vicinity of suitable habitat will cease until the California Department of Transportation (Caltrans) contacts the Service and a biological opinion is issued to address impacts to the species. In addition, for riparian/riverine vegetation that could support least Bell's vireo, vegetation removal restrictions occur through September 15, unless the riparian/riverine vegetation is determined through protocol surveys to be unoccupied. If construction activities and disturbances to vegetation cannot be avoided during the active breeding season, Measures **AMM BIO-14**, **AMM BIO-26**, and **AMM BIO-30** are required (refer to Measure **AMM BIO-14** for the nesting bird survey requirements and Measures **AMM BIO-26** and **AMM BIO-30** for the least Bell's vireo and coastal California gnatcatcher preconstruction protocol survey requirements). **Table 1. Natural, Sage Scrub, and Riparian Vegetation Clearing Restrictions** **Clearing Restriction** / **Natural Vegetation with Clearing Restriction** March 1–June 30 / All natural vegetation communities. February 15–August 30[1] / Riversidian sage scrub.[1] March 1–September 15 / Riparian habitats, including mulefat scrub. [1] Unless the Riversidian sage scrub habitat within the project survey area is negative for coastal California gnatcatcher by the preconstruction protocol surveys and authorization for vegetation clearance is confirmed by the wildlife agencies (see Measure **AMM BIO-30**).	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor	Construction							

Date: (6/4/2026) Project Phase: 1 ☒ PA&ED ☐ PS&E ☐ Construction	MITIGATION MONITORING AND REPORTING PROGRAM (Gilman Springs Road Bridge Replacement Project)										
Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
SM BIO-2, Dust Control. Active construction areas will be watered regularly to control dust and therefore minimize impacts on adjacent vegetation.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor	Construction							
AMM BIO-3, Fire Prevention. When work is conducted during the fire season (as identified by the Riverside County Fire Department), appropriate fire-fighting equipment (e.g., extinguishers, shovels, water tankers) will be available on the Project site during all phases of Project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire preventative methods will be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and responses to fires will advise contractors regarding fire risk from all construction-related activities.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Personnel	Construction							
AMM BIO-4, Biological Monitoring. The qualified Project biologist will monitor construction activities for the duration of the Project at a frequency necessary to ensure that practicable measures are being employed and avoid incidental disturbance of habitat and species of concern outside the Project footprint. Special attention will be provided to ensure that environmentally sensitive area (ESA) fencing is maintained. Additionally, monitoring and reporting will occur weekly if active nests are present for the duration of the construction activity to ensure implementation of best management practices.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Personnel	Construction							
AMM BIO-5, Construction Limits and ESA Fencing. Construction personnel will strictly limit their activities, vehicles, equipment, and construction materials to the proposed Project footprint and designated staging areas and routes of travel. The construction area(s) will be the minimal area necessary to complete the Project and will be specified in the construction plans. Construction limits adjacent to sensitive areas will be demarcated using environmentally sensitive area (ESA) fencing (e.g., orange snow fencing, silt fencing, signage). The ESA fencing will be reviewed at a frequency deemed necessary by the biological monitor until the completion of all construction activities. For the ESA fencing installed within areas containing suitable habitat for Los Angeles pocket mouse, the fencing must exclude this species from entering the Project limits of disturbance (as indicated in Measure **AMM BIO-27**). Employees will be instructed that their activities are restricted to the construction areas. Access to sites will be from pre-existing access routes.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
AMM BIO-6, Exotic Species. Exotic plant species removed during construction will be properly handled to prevent sprouting or regrowth. Vegetation removed from the Project site will be covered while being carried on trucks, and vegetation materials removed from the site will be disposed of in accordance with applicable laws and regulations. For temporarily impacted areas, for the duration of construction, if construction activities are stopped for a duration of 30 days or greater, any lands disturbed and left bare will be inspected by a qualified restoration ecologist for growth of non-native plant species listed as Moderate or High by the California Invasive Plant Council (Cal-IPC) (e.g., stinknet [*Oncosiphon pilulifer*], tocalote [*Centaurea melitensis*]). If detected, these species, with the exception of non-native grasses, shall be removed within 5 days of detection. All material from species with a Cal-IPC rating of Moderate or High will be bagged, removed, and disposed of off site. This measure will only be required if Project construction is ceased for 30 days or more.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Construction							
AMM BIO-7, Equipment Cleaning. Construction equipment will be cleaned of mud or other debris that may contain invasive plants and/or seeds and inspected to reduce the potential of spreading noxious weeds before mobilizing to the site and before leaving the site during the course of construction. The cleaning of equipment will occur at least 100 feet from environmentally sensitive area (ESA) fencing and any drainages to prevent the spread of invasives.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Construction							
MM BIO-8, Revegetation of Disturbed Areas. Soil and vegetation disturbance will be minimized. Post-construction, any disturbed areas remaining as bare ground will be returned to original or better conditions. To ensure that all areas remaining as bare ground post-construction are returned to original or better conditions, the following requirements will be met: • Affected areas will be returned to natural contour grades, decompacted to eliminate compressed soils and allow for plant establishment, and replanted and/or hydroseeding, using native species sourced from a reputable nursery in the local area.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction							
• Replanting may occur through hydroseeding and/or the use of container plantings, depending on the affected area and previous conditions prior to disturbance.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**	**Remarks**	**Environmental Compliance**	
									YES	**NO**
• All revegetated areas will avoid the use of any species listed on the California Invasive Plant Council's (Cal-IPC's) California Invasive Plant Inventory or in Table 6-2 of the Western Riverside County Multiple Species Conservation Plan (MSHCP), Volume 1, Section 6.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
For temporarily disturbed areas containing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and/or Additional Reserve Lands (ARL), the following additional requirements must also be met:										
• All temporarily impacted riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and ARL will be returned to original conditions or better through onsite restoration at a 1:1 ratio.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
• Onsite, in-kind restoration of these affected areas would occur at their current locations upon completion of construction.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
• A Habitat Mitigation and Monitoring Plan (HMMP) and Restoration Plan will be prepared for temporary impact areas containing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and/or ARL and must meet the following requirements:	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
○ Detailed specific onsite revegetation criteria, including, but not limited to, seed mix/potted plant size, planting palette, and stock sources; site preparation; planting techniques; watering requirements; plans to remove and control invasive plant species; requirements for maintenance and monitoring; success criteria metrics; identification of responsible parties; reporting requirements; and remedial measures in the event that revegetation standards are not met.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
○ Detailed restoration plans and specifications with performance standards and monitoring requirements to ensure that the functions and values of the existing riparian/riverine resources, Los Angeles pocket mouse occupied and long-term conservation value habitat, and ARL are replaced with equivalent or superior resources.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance** YES / NO
○ Implementation for 5 years, with the potential for early sign-off as determined by Western Riverside County Regional Conservation Authority (RCA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW).	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
○ Success criteria in the Habitat Mitigation and Monitoring Plan must include trapping and documentation to confirm that Los Angeles pocket mouse has re-occupied all habitat with long-term conservation value for the species that overlaps with existing ARL (not proposed ARL) once restoration has been completed.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
○ Reviewed and approval by RCA, USFWS, and CDFW prior to project implementation, including any vegetation removal, equipment staging, or ground disturbance.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Post-Construction						
AMM BIO-9, Weed Abatement Plan. A weed abatement plan will be developed to minimize the spread and importation of non-native plant material during and after construction, in compliance with Executive Order 13112. The plan will incorporate Measures **AMM BIO-6, AMM BIO-7,** and **MM BIO-8.**	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Construction/Post-Construction						
AMM BIO-10, Water Pollution Control Plan. Plans for water pollution and erosion control (i.e., Storm Water Pollution Prevention Plan [SWPPP]) will be prepared in accordance with Project aquatic resource permits and other Project requirements. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. The SWPPP will be reviewed and approved by the County prior to construction. The following measures will be followed in the plans, as applicable, to ensure consistency with the Western Riverside County Multiple Species Conservation Plan (MSHCP): • Water pollution and erosion control plans will be developed and implemented in accordance with Regional Water Quality Control Board (RWQCB) requirements and will ensure that no fluids or sediment from construction will enter the fenced environmentally sensitive areas (ESA) or flow off the Project site. • Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized. • No erodible materials will be deposited into watercourses or areas demarcated with ESA fencing. Vegetation, loose soils, or other debris material will not be stockpiled within stream	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Qualified Biologist/ County	Pre-construction/ Construction						

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
channels or on adjacent banks. • If stream flows must be diverted, the diversions will be conducted using sandbags or other methods requiring minimal instream impacts as directed in Project permits. Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activity to minimize the transport of sediments off site. Settling ponds where sediment is collected will be cleaned out in a manner that prevents the sediment from reentering the stream (if applicable). Care will be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream. Short-term diversions will consider impacts on wildlife. • Equipment storage, fueling, and staging areas will be located on non-sensitive upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas will be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions will be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials will be reported to appropriate entities, including, but not limited to, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and the RWQCB, and will be cleaned up immediately and contaminated soils removed to approved disposal areas. • All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances will occur only in designated areas within the proposed grading limits of the Project site. These designated areas will be clearly marked and located in such a manner as to contain runoff and will be at least 50 feet from any drainage.											
AMM BIO-11, Aquatic Resources Avoidance. The Project limits of disturbance (LOD), including the upstream, downstream, and lateral extents on either side of any stream adjacent to the Project impact footprint, will be clearly defined and marked in the field. A qualified biologist will review the LOD prior to initiation of construction activities. This will ensure avoidance of jurisdictional areas and riparian habitat.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction/ Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**	**Remarks**	**YES**	**NO**
AMM BIO-12, Biological Training. A qualified biologist will conduct a training session for Project and construction personnel prior to grading or staging. The training will include a description of the species of concern and their habitats, the general provisions of the Endangered Species Acts (Federal Endangered Species Act and California Endangered Species Act) and the Western Riverside County Multiple Species Conservation Plan (MSHCP), the need to adhere to the provisions of the acts and the MSHCP, the penalties associated with violating the provisions of the acts, and the general measures that are being implemented to conserve the species of concern as they relate to the Project.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction						
AMM BIO-13, Waste Management. To avoid attracting predators of the species of concern, the Project site shall be kept as clean of debris as possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the site(s). Waste, dirt, or rubble, or trash will not be deposited in a Western Riverside County Multiple Species Conservation Plan (MSHCP) Conservation Area or on native habitat.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Construction						
AMM BIO-14, Nesting Bird Preconstruction Surveys. If construction commences during the bird breeding season, a preconstruction survey for nesting birds within suitable habitat will occur within 3 days prior to construction activities by an experienced avian biologist. The survey will occur within all suitable nesting habitat within the Project impact area and a 250-foot buffer where access is permitted. If nesting birds are found, an avoidance area of 500 feet for raptors and special-status species and up to 100 feet for non-raptors will be established by a qualified biologist around the nest until it is determined that young have fledged or nesting activities have ceased. The Project site will need to be re-surveyed if there is a lapse in construction activities for more than seven days during the nesting season.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction						
AMM BIO-15, Swallow Nest Removal and Exclusion Efforts. Swallow nesting habitat at the Gilman Springs Road Bridge over Potrero Creek will be cleared of all swallow nests prior to any work conducted between February 1 and August 31. Swallow nests will be removed under the guidance of a qualified biologist prior to February 1, before swallows return to the nesting site. Prior to the removal of nests, the qualified biologist will inspect and ensure that no bats are roosting in the nests. Removal of swallow nests that are under construction must be repeated as frequently as necessary to prevent nest completion or until a nest exclusion device is installed,	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction/ Construction						

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**	**Remarks**	**Environmental Compliance**	
									YES	**NO**
such as netting or a similar mechanism that keeps swallows from building nests. Nest removal and exclusion device installation will be monitored by a qualified biologist. Such exclusion efforts must be continued to keep the structures free of swallows, as well as swifts utilizing bridge weep holes, until August 31 or completion of construction.										
AMM BIO-16, Sensitive Wildlife Preconstruction Clearance Surveys. A preconstruction sweep will be conducted by a qualified biologist each morning prior to clearing/grubbing or initial disturbance in areas of suitable habitat to support terrestrial wildlife. The goal of the survey will be to identify any special-status species not covered by the Western Riverside County Multiple Species Conservation Plan (MSHCP) that may be present within the Project footprint, and to remove the animal(s) from the Project footprint as possible to avoid any injury or mortality. No nesting birds will be flushed during the nesting season, as specified in Measures **AMM BIO-14** and **AMM BIO-15**. Bats will not be flushed but will be protected as specified in Measures **AMM BIO-19** through **AMM BIO-21**. Amphibians, reptiles, and burrowing wildlife will be relocated from the site of temporary or permanent impacts as feasible during preconstruction clearance surveys by the qualified biologist.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction						
AMM BIO-17, MSHCP Covered Species Avoidance. During construction, the placement of equipment within a stream or on adjacent banks or adjacent upland habitats occupied by Western Riverside County Multiple Species Conservation Plan (MSHCP) Covered Species that are outside of the Project footprint will be avoided.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Construction						
AMM BIO-18, Burrowing Owl Preconstruction Surveys. A 30-day preconstruction survey for burrowing owl is required prior to initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no burrowing owls have colonized the site in the days or weeks preceding the ground-disturbing activities. Preconstruction surveys will be conducted in the morning 1 hour before sunrise to 2 hours after sunrise or in the early evening 2 hours before sunset to 1 hour after sunset within areas providing suitable habitat for burrowing owl. The survey will include the proposed Project limits and a 500-foot buffer. If burrowing owls are present within 500 feet of Project activities, the following measures will be implemented, as applicable:	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction						

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
• If burrowing owls have colonized the Project site prior to the initiation of ground disturbing activities, the qualified biologist will immediately inform and coordinate further with the wildlife agencies (i.e., California Department of Fish and Wildlife [CDFW] and U.S. Fish and Wildlife Service [USFWS]) and the Western Riverside County Regional Conservation Authority (RCA), including the possibility of preparing a Burrowing Owl Protection and Relocation Plan, prior to initiating ground disturbance. The Burrowing Owl Protection and Relocation Plan will provide any additional avoidance/minimization, relocation/exclusion, and monitoring methods that will be used, nest buffers, and any additional mitigation requirements, which may include the following: ○ If burrowing owl are found outside of the Project site but within 500 feet of Project activities during preconstruction take avoidance surveys during the nesting season, the burrowing owl will be fully avoided by establishing an appropriate buffer in coordination with RCA, CDFW, and USFWS. No work will occur within the buffered area until a qualified biologist has verified that burrowing owl young have fledged, or owls are no longer occupying the burrow. ○ If burrowing owl are found during preconstruction take avoidance surveys outside of the nesting season, passive relocation by a qualified avian biologist will be conducted once it has been confirmed that pairing activities are not observed. Passive relocation efforts will be conducted in coordination with RCA, CDFW, and USFWS. ○ If construction activities have ceased or the site has been left undisturbed for more than 30 days, a preconstruction survey must be repeated to ensure that burrowing owl has not recolonized the site. If burrowing owl is found, the same coordination described above will be necessary. • Agency Approval – If burrowing owls have colonized the Project site prior to the initiation of ground disturbing activities, the Burrowing Owl Protection and Relocation Plan will be submitted for review to RCA, CDFW, and USFWS. Project construction or other ground-disturbing activities are not allowed to commence until the Burrowing Owl Protection and Relocation Plan has been approved by RCA, CDFW, and USFWS.											

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										YES	NO
AMM BIO-19, Bat Roost Evictions and Exclusions. To avoid direct mortality, humane evictions and exclusions of roosting bats shall be performed under the supervision of a qualified bat biologist in the fall (September or October) prior to bridge demolition activities. Eviction/exclusion may be implemented in one or two phases at the discretion of the qualified bat biologist and in coordination with the Project contractor. To avoid potential mortality of flightless juvenile bats, evictions and exclusions of bats cannot be performed during the bat maternity season (April 1 through August 31) if any crevice habitat cannot be 100 percent inspected. Evictions should not occur during winter months (generally November through February, but specifically periods during which nighttime temperatures are consistently less than 50°F).	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction/ Construction							
AMM BIO-20, Tree Roosting Bat Avoidance. Prior to tree removal or trimming, large trees and snags shall be examined by a qualified bat biologist to ensure that no roosting bats are present. Palm frond trimming, if necessary, shall be conducted outside the maternity season (i.e., April 1 through September 1) to avoid potential mortality of flightless young. If trimming or removal of mature trees and snags is necessary for Project construction, trimming/removal activities should be performed outside of the general bat maternity season, which occurs March 1 through October 1, to avoid direct effects to nonvolant (flightless) young that may roost in trees within the study area. If trimming or removal of trees during the general bat maternity season cannot be avoided, a qualified biologist will monitor tree removal unless nighttime surveys conducted within one week of removal indicates no tree-roosting bat activity within the study area. • **Day 1:** Only trim the outermost fronds (no more than 50 percent of the palm fronds) using hand tools or chainsaws only (no dozers, backhoes, cranes, or other heavy equipment, other than to provide access for tree cutters using chainsaws). • **Day 2:** The palm tree must be felled. Day 2 activities must occur the day immediately following the Day 1 activities. To accomplish this, work may need to be phased and Day 1/Day 2 steps can be repeated. Should bats emerge during the tree trimming, trimming activities must temporarily cease at the individual tree until bats are no longer actively emerging from the tree.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction/ Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
AMM BIO-21, Bat Maternity Roost Avoidance. The Gilman Springs Road Bridge over Potrero Creek shall be inspected for maternity roosts prior to the start of any construction activities if work is being performed during the maternity season (i.e., April 1 through August 31). If maternity sites are identified, construction activities at that location will not be allowed during the maternity season, unless a qualified bat biologist has determined that the young have been weaned. If maternity sites are present, and it is anticipated that construction activities cannot be completed outside the maternity season, then bat eviction and exclusion at maternity roost sites will be completed under the direction of California Department of Fish and Wildlife (CDFW) and the qualified bat biologist as soon as possible after the young have been weaned or outside the maternity season, or as otherwise approved by the qualified bat biologist in coordination with CDFW.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction/ Construction							
AMM BIO-22, Nighttime Lighting Minimization. Should nighttime construction activities occur, then night lighting shall be shielded and directed downward and away from the Western Riverside County Multiple Species Conservation Plan (MSHCP) Conservation Area, including the Potrero Creek drainage, to protect species from direct lighting and to minimize potential impacts on wildlife movement corridors. The MSHCP requires that shielding be incorporated in Project designs to ensure ambient lighting in MSHCP Conservation Areas is not increased (MSHCP Volume I, Section 6.1.4).	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Project Engineer/ Contractor	Pre-Construction/ Construction							
AMM BIO-23, Wildlife Movement Corridors Avoidance. Equipment maintenance and staging will occur only in designated areas, and will not block or impede movement through wildlife corridors. Temporal impacts will be reduced through adding a specification to the design plans to include a 10-foot-wide opening during construction under the falsework that will allow for wildlife movement during construction. The contractor will develop a plan once falsework locations have been determined. This plan will be provided to Western Riverside County Regional Conservation Authority (RCA), U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Wildlife (CDFW). In addition, the replacement bridge would add a crossing bench along the top of one of the wingwalls to provide a dry crossing for wildlife movement under the bridge when water is present.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Project Engineer/ Contractor/ County	Pre-Construction/ Construction							

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										YES	NO
MM BIO-24, Aquatic Resources Mitigation. Mitigation for permanent impacts on jurisdictional aquatic resources will occur onsite as a result of the beneficial aspects of expanding the bridge length, which will involve expanding and recontouring the channel, extending the abutments, and removing old fill (including rock riprap). This would increase the aquatic resources habitat by at least a 3:1 ratio by converting uplands to stream channel, which will achieve a no net loss of jurisdictional aquatic resources. No offsite mitigation for permanent impacts is proposed. Temporary impacts on jurisdictional aquatic resources will be replaced in-kind at a 1:1 ratio at their current locations through onsite restoration of the temporarily affected area to pre-project conditions (e.g., natural grade recontouring, decompacted soils, replanting of native species via hydroseeding and/or container planting; see **MM BIO-8** for details).	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Project Engineer/ Contractor/ County	Pre-Construction/ Construction							
MM BIO-25, Riparian/Riverine Resources Mitigation. Mitigation for permanent impacts on riparian/riverine resources will occur onsite as a result of the beneficial aspects of expanding the bridge length, which will involve expanding and recontouring the channel, extending the abutments, and removing old fill (including rock riprap). This would increase the riverine habitat by at least a 3:1 ratio by converting uplands to stream channel, which will achieve a no net loss of riparian/riverine resources. No offsite mitigation for permanent impacts is proposed.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Project Engineer/ Contractor/ County	Pre-Construction/ Construction							
AMM BIO-26, Least Bell's Vireo Preconstruction Protocol. Surveys. If Project-related ground-disturbing activities are anticipated prior to least Bell's vireo breeding season, a qualified biologist familiar with the species will follow established survey protocols to demonstrate species absence. Preconstruction surveys for least Bell's vireo will occur at the appropriate time of year. Preconstruction surveys will be performed in suitable riparian habitat and will include the proposed project limits and a 500-foot buffer. The surveys will adhere to the U.S. Fish and Wildlife Service (USFWS) guidelines for least Bell's vireo presence/absence surveys (USFWS 2001). If nesting activities or active nests are discovered, a buffer zone will be clearly marked by the biologist and no construction activities will occur within the buffer zone until the young have fledged or the nest is no longer active. The buffer zone will be highly visible and maintenance of the buffer will be performed weekly, but more often if needed. The buffer zone will also take into account construction-related disturbances (e.g., increased noise levels, vibrations, human presence) that could negatively modify	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
foraging or nesting behavior. In addition, all conditions under the 10(a) Incidental Take Permit that was issued for permittees of the Western Riverside County Multiple Species Conservation Plan (MSHCP) will be implemented for active least Bell's vireo nests. If take may occur, including negatively affecting least Bell's vireo foraging or nesting behavior, then consultation with Western Riverside County Regional Conservation Authority (RCA), USFWS, and California Department of Fish and Wildlife (CDFW) will be required.										
AMM BIO-27, Exclusion Fencing for Los Angeles Pocket Mouse. Exclusion fencing will be installed around all areas with suitable habitat for Los Angeles pocket mouse (i.e., Riversidian upland sage scrub and unvegetated stream channel) that will be affected by Project construction. The qualified biologist experienced with Los Angeles pocket mouse will be present on site when the fence is installed to minimize the disturbance of Los Angeles pocket mouse burrows from the fence installation and to ensure that the exclusion fencing is installed correctly per the approved fencing plan design and specifications. Exclusionary trapping for Los Angeles pocket mouse will be conducted during the five nights preceding ground disturbance by a qualified biologist within Los Angeles pocket mouse suitable habitat areas where exclusionary fence is installed to remove all Los Angeles pocket mice prior to the start of any ground disturbance. Los Angeles pocket mice trapped in these areas will be released in suitable habitat areas, outside the construction limits, in the immediate Project vicinity. The exclusion fencing will remain in place for the duration of the project and will be installed in a manner that ensures that Los Angeles pocket mouse cannot access the construction site, including burrowing or crawling under or through the fence or climbing over the fence. The construction site will be monitored as appropriate by a qualified biologist to ensure that Los Angeles pocket mouse are not gaining access to the construction site. If individuals or their sign are detected within the fencing limits, then trapping and/or burrow excavation will be performed to remove any Los Angeles pocket mouse present within the site, and fencing will be repaired as needed. An Exclusion Fencing Design will be prepared and must be reviewed and approved by Western Riverside County Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS) prior to project implementation.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction/ Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
AMM BIO-28, Crotch's Bumblebee Preconstruction Surveys. If Project work is to occur during the active Crotch's bumblebee season (February to October) or during the blooming season for flowering plants that support Crotch's bumblebee, then preconstruction surveys will be performed prior to the start of any Project construction or ground disturbance to ensure that Crotch's bumblebee is not active within the Project area. Surveys are to be conducted by a qualified biologist and shall follow the guidelines described in the *California Department of Fish and Wildlife (CDFW) Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species* (CDFW 2023). If this species is detected, then consultation with CDFW will be required.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction							
AMM BIO-29, ESA Fencing for Crotch's Bumblebee. Prior to clearing or construction, environmentally sensitive area (ESA) fencing will be installed around all habitat that contains suitable soils and/or areas of annual flowering plants to support Crotch's bumblebee that are adjacent to the Project footprint to designate ESAs to be avoided (see Measure **AMM BIO-5**).	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction							
AMM BIO-30, Coastal California Gnatcatcher Preconstruction Protocol Surveys. If initial ground-disturbing activities (e.g., vegetation clearing, clearing and grubbing, tree removal, site watering) occurs during the active breeding season for coastal California gnatcatcher (February 15–August 30), then a qualified biologist will conduct preconstruction protocol surveys for coastal California gnatcatcher during the breeding season prior to the start of ground-disturbing activities to ensure that the species is not nesting within the project area. Preconstruction protocol surveys will be conducted in suitable sage scrub habitat and will include the proposed project limits and a 500-foot buffer. The surveys will adhere to the U.S. Fish and Wildlife Service (USFWS) guidelines for coastal California gnatcatcher presence/absence surveys (USFWS 1997). If surveys are positive, then no vegetation clearing within suitable habitat can occur per Western Riverside County Multiple Species Conservation Plan (MSHCP) Volume I, Section 7.5.3. If surveys are negative, then confirmation from the wildlife agencies (i.e., USFWS and California Department of Fish and Wildlife [CDFW]) prior to start of any ground-disturbing activities would be required to proceed with vegetation clearing.	Section 2.4.3 IS/MND	IS/MND, Section 2.4.3	Contractor/ Qualified Biologist	Pre-Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
Cultural Resources											
SM CR-1. Due to the general archaeological sensitivity of the project vicinity, the County of Riverside will retain a qualified archaeologist and a Tribal Monitor(s)to provide archaeological monitoring during ground disturbing activities in areas of previously undisturbed and native soils. Specifically, the following measures will be implemented: • The County of Riverside will retain a qualified professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards in archaeology, as promulgated in Code of Federal Regulations (CFR), Title 36, to oversee all monitoring work and supervise the archaeological monitor(s). • Prior to the start of construction, a monitoring plan will be prepared that describes the nature of the archaeological monitoring work, procedures to follow in the event of an unanticipated discovery, and reporting requirements. • The archaeological and tribal monitor will only be present onsite during construction that involves ground-disturbing activities such as, but not limited to, potholing, boring, grading, excavation, trenching, or drilling within previously undisturbed and native soils. • Archaeological and tribal monitoring will not occur for work activities that include the demolition and removal of nonnative materials such as existing concrete, asphalt pavement, and pavement base layers, or ground-disturbing activities that occur within previously disturbed areas. • If archaeological resources are encountered during construction, the contractor will: ○ Halt all work within a 60-foot radius and will immediately inform the Resident Engineer (RE), County representative, and Caltrans archaeologist. ○ Following notification, a qualified archaeologist will make a preliminary assessment of the discovery to determine whether the find is an isolated artifact or recent deposit. The archaeologist will have equipment and materials at the site with them to be able to record and document any discovery.	Section 2.5.3, IS/MND	IS/MND, Section 2.5.3	County/ Contractor/ Qualified Archaeologist/ Tribal Monitor	Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
If the find is determined to be isolated or recent, construction will be allowed to resume. ○ Should the archaeologist determine that the discovery is potentially significant, the archaeologist will evaluate the discovery and, if necessary, formulate appropriate mitigation measures after consultation with the County and Caltrans. ○ If the discovery contains Native American archaeological resources, all Native American consulting Tribes will be contacted and informed of the discovery. ○ Additionally, if precontact or historic-era archaeological resources are encountered anywhere during project construction when no archaeologist is present, work in the area will halt within a 60-foot radius until a qualified archaeologist can evaluate the nature and significance of the find and formulate appropriate evaluation or mitigation measures. Should the deposit contain Native American resources, the County will consult with consulting Tribes as to how the deposit and any associated artifacts and features should be treated. ○ Once the archaeologist has determined that the archaeological deposit has been sufficiently documented and recovered or removed and concluded that further construction activities would not affect additional archaeological deposits in the immediate area, construction activity can resume in that area. ○ If an archaeological deposit or cultural resource has been found on site, there will need to be a location to be able to safely store the items on site. This can be an onsite secured field office trailer or a construction storage container. • A final cultural resources report will be produced, which will discuss the monitoring program and its results and provide interpretations of any recovered cultural materials.										

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
SM CR-2. In the event that human remains are discovered during construction at any time, the following provisions will apply: 1. All ground disturbing activity will immediately be halted within 100 feet of the discovery. The County will be informed and will then immediately contact the Riverside County Coroner and the qualified archaeologist (if not already present). The County Coroner is to be contacted within 24 hours of discovery. The County Coroner has 48 hours to make his/her determination pursuant to California Health and Safety Code Section 7050.5 and California Public Resources Code (PRC) Section 5097.98. During these 48 hours, all remains, associated soils and artifacts will remain in situ, undisturbed, and will be protected from public viewing. A physical barrier will be constructed on the perimeter of the protected 100- foot radius area. The County will take appropriate measures to protect the discovery site from disturbance during all procedures and negotiations. This shall include restricting access to the discovery site and if needed, hiring 24-hour security. No photographs are to be taken of the discovery except by the Coroner, with the permission of the Consulting Tribe(s). 2. In accordance with California Health and Safety Code Section 7050.5, if human remains are encountered no further disturbance will occur until the County Coroner has made a determination of origin of the remains and their disposition pursuant to California PRC Section 5097.98. If the remains are determined to be Native American, within 24 hours the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the County, the MLD may inspect the site of the discovery. The MLD will complete the inspection of the discovery within 48 hours of notification by the NAHC. The MLD shall make a recommendation for the final treatment and disposition, with appropriate dignity, of the remains and all associated funerary objects pursuant to California PRC Section 5097.98. 3. The qualified archaeologist will work with the MLD in regard to the treatment of the remains and all associated funerary objects and will ensure that any identified human remains will be secured while they are left in place and while treatment and disposition alternatives are being discussed. Information concerning the discovery and its location will not be disclosed pursuant to the specific exemption set forth in California Government Code	Section 2.5.3, IS/MND	IS/MND, Section 2.5.3	Contractor/ County/ Qualified Archaeologist/ California State Native American Heritage Commission	Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
Section 6254.5(e). 4. The County will relinquish ownership of all Native American ancestral remains and cultural resources, including but not limited to, sacred items and funerary objects, found within County right-of-way. One or more of the following procedures will be followed and the County will provide evidence of same: a. A fully executed reburial agreement with the appropriate culturally affiliated Native American Tribe(s) or band(s). This will include measures and provisions to protect the reburial area from any future impacts. Reburial will not occur until all cataloguing and necessary recordation have been completed. b. A curation agreement with an appropriately qualified repository within Riverside County that meets federal standards per Code of Federal Regulations, Title 36, Part 79 will be established. The collections and associated records will be transferred, including title, to an appropriate curation facility within Riverside County, to be accompanied by payment of the fees necessary for permanent curation. 5. Should reburial of collected cultural items be preferred, it will not occur until after a Monitoring Report, and potentially a Data Recovery Report (if one is prepared), has been submitted to the County and reviewed by the Consulting Tribe(s). Should curation be preferred, the County is responsible for all costs. The qualified repository selected, the curation methods, and a complete catalog of the collection will be included in the Data Recovery Report. 6. According to California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052). In the event that the County and MLD are in disagreement regarding the disposition of the remains, State law will apply, and the median and decision process will occur with the NAHC (see California PRC Sections 5097.98(e) and 5097.94(k)).										
SM CR-3. Prior to any project-related ground disturbance, the County shall ensure that all construction workers conducting ground disturbing activities receive training overseen by a qualified professional archaeologist who meets the U.S. Secretary of Interior Standards (SOI). The archaeologist will conduct a Cultural Resource Sensitivity Training, in conjunction with the Tribe's Tribal Historic	Section 2.5.3, IS/MND	IS/MND, Section 2.5.3	County/ Contractor/ Qualified Archaeologist	Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
Preservation Officer (THPO), and/or designated Tribal Representative. The training session will focus on the archaeological and tribal cultural resources that may be encountered during ground-disturbing activities as well as the procedures to be followed in such an event.											
SM CR-4. If precontact- or historic-era archaeological resources are encountered anywhere during project construction, all ground disturbing activities within a 60-foot radius must halt until a qualified archaeologist and Tribal Monitor(s) can evaluate the nature and significance of the discovery and formulate appropriate treatment measures. The qualified archaeologist and the Tribal Monitor(s) will have the authority to temporarily divert and/or stop work in the area of discovery to allow for the evaluation of the discovery. Isolates and clearly non-significant deposits will be documented in the field and collected so that monitored work can proceed. If a potentially significant cultural resource(s) is discovered, an Environmentally Sensitive Area (ESA) physical demarcation/barrier shall be constructed. The qualified archaeologist will notify the County and Consulting Tribe(s) of said discovery. The qualified archaeologist, in consultation with the County, the Consulting Tribe(s), and the Tribal Monitor(s), shall determine the significance of the discovered resource. Native American artifacts and finds suspected to be Native American in nature are to be considered as potential Tribal Cultural Resources until the County has determined otherwise through consultation with Consulting Tribe(s). A recommendation for the treatment and disposition of the Tribal Cultural Resource shall be made by the qualified archaeologist in consultation with the Tribal Monitor(s) and be submitted to the County for review and approval. Potential treatments and dispositions of significant cultural resources can include: • Full avoidance. • If avoidance is not feasible, preservation in place. • If preservation in place is not feasible, all items shall be reburied in an area protected from any future impacts and within a permanent conservation easement or Deed Restriction.	Section 2.5.3, IS/MND	IS/MND, Section 2.5.3	County/ Contractor/ Qualified Archaeologist/ Tribal Monitor	Construction						

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
• If all other options are proven to be infeasible, data recovery through excavation and then curation in a Curation Facility that meets the Federal Curation Standards (36 CFR 79). No monitoring will occur outside of the project limits; any artifacts that are found on private land that are outside of the project limits and outside of the County right-of-way may be relinquished to the Consulting Tribe(s) by the landowner for suitable curation or disposition. The Consulting Tribe(s) will need to facilitate the discussions between the landowner and themselves.											
Geology, Soils, and Paleontological Resources											
SM GEO-1. Prior to any ground disturbance at the project site, a Paleontological Mitigation Plan (PMP) will be prepared by a qualified professional paleontologist. Should paleontological resources be unearthed unexpectedly during construction, the PMP will be implemented. The PMP will follow the guidelines and recommendations of the Society of Vertebrate Paleontology. The PMP details the requirements for paleontological monitoring: • The qualified paleontologist will consult with the grading and excavation contractors. • Paleontological monitoring will be conducted for ground-disturbing activities in areas outside of modern artificial fill. • The paleontological monitor has the authority to temporarily halt or redirect construction or grading work to evaluate potential paleontological resources. When work is halted or redirected, the Principal Paleontologist will be contacted immediately, and will implement the notification, documentation, evaluation, and treatment procedures outlined in the PMP as expeditiously as possible to avoid potential project delays. • The qualified paleontologist or paleontological monitor will salvage and recover paleontological resources should any be discovered. • Monitors will document the progress of construction through photography, field notes, and GPS mapping. • A final summary report will be completed of the findings and significance of any salvaged or recovered paleontological resource.	Section 2.7.3, IS/MND	IS/MND, Section 2.7.3	Contractor/ County/ Qualified Paleontologist	Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
Hazards and Hazardous Materials											
AMM-HAZ-1, ACM and LBP Surveys. Prior to construction, ACM and LBP surveys will be conducted by a qualified contractor to determine the presence of these materials. If discovered on site, abatement will be conducted in accordance with South Coast Air Quality Management District Rule 1403 and any other applicable laws prior to demolition. In addition, if underground utilities, pipelines, or associated pieces of subsurface infrastructure are accidentally disturbed during construction, the exposed feature will be surveyed for asbestos content prior to being handled. Surveying and abatement of the material (if discovered) will also be conducted by a certified specialist in accordance with all applicable laws.	Section 2.9.3, IS/MND	IS/MND, Section 2.9.3	Contractor	Construction							
AMM-HAZ-2, Visual and Olfactory Monitoring During Construction. In the event an undocumented contaminant is discovered during construction, and although contaminated soil is not likely to be present on the Project site (due to the environmental status of onsite and offsite hazardous materials sites presented in the Project-specific ISA), the contractor will observe exposed soil for visual and olfactory evidence of contamination as well as the possible presence of unknown hazardous material sources, such as buried containers, underground tanks, and/or associated piping, during excavation activities. If visual or olfactory contamination indicators or unknown hazardous material sources are observed during excavation or grading activities, all work will stop, and an SI be designed and performed to verify the presence and extent of contamination and/or potential hazards at the site. A qualified and approved environmental consultant will perform the SI. Results will be reviewed and approved by the applicable local and State agencies prior to construction. The SI will include sample collection for laboratory analysis and quantifying contaminant levels within the proposed excavation and disturbance areas. The SI will determine appropriate worker protection and hazardous material handling and disposal procedures for the Project site.	Section 2.9.3, IS/MND	IS/MND, Section 2.9.3	Contractor	Construction							
AMM-HAZ-3, Onsite Personnel Training Requirements and Health and Safety Plan Implementation. If soil determined to be hazardous waste would result in impacts on the Project, such soil will be excavated by personnel who have been trained through the Occupational Safety and Health Administration's recommended 40-hour safety program (29 Code of Federal Regulations	Section 2.9.3, IS/MND	IS/MND, Section 2.9.3	Contractor	Construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
1910.120), with an approved plan for excavation, control of contaminant releases to the air, and offsite transport or onsite treatment. Health and safety plans prepared by a certified industrial hygienist will be developed to protect the public and all workers in the construction area. Health and safety plans will be reviewed and approved by the appropriate local and State agencies.											
AMM-HAZ-4, Proper Handling of Yellow or White Paint or Thermoplastic Traffic Stripes. Should construction activities result in the removal of yellow or white paint or thermoplastic traffic stripes, the age of the traffic striping will be determined. If appropriate, the material will be sampled prior to removal, and if lead and/or chromium is present in the materials at or above the hazardous waste levels, it will be disposed of at a permitted disposal facility. In addition, a Project-specific LCP will be required to prevent or minimize worker exposure to lead while handling materials containing lead, per Title 8, California Code of Regulations, Section 1532.1, Lead.	Section 2.9.3, IS/MND	IS/MND, Section 2.9.3	Contractor	Construction							
AMM-HAZ-5, Proper Handling of Treated Wood Waste. If encountered on the Project site and planned to be removed or reused, power poles, wood planks, wood electric utility poles, or guardrail posts (including previously salvaged posts) in the Project right of way should be tested to identify the presence and nature of treatment. These materials should be managed or disposed of as treated wood waste under the Alternative Management Standards, in accordance with DTSC guidance for the management of treated wood waste.	Section 2.9.3, IS/MND	IS/MND, Section 2.9.3	Contractor	Construction							
AMM-HAZ-6, PCB Soil Impacts. During final design but prior to construction, if pole-mounted transformers are found within Project work areas, they should be inspected for leaks. Leaking transformers should be considered a potential PCB hazard, and potentially affected soils should be tested prior to excavation. Soil handling, transport, and disposal should be pursuant to applicable regulations and the results of soil testing.	Section 2.9.3, IS/MND	IS/MND, Section 2.9.3	Project Engineer/ Contractor/ County	Pre-Construction/ Construction							
Hydrology and Water Quality											
SM WQ-1, Construction BMPs. Construction site BMPs, as well as any other applicable permit conditions, would be specified in the water pollution control plan to minimize any introduction of construction-related contaminants or the mobilization of sediment into drainages in or adjacent to the Project area.	Section 2.10.3, IS/MND	IS/MND, Section 2.10.3	Project Engineer/ Contractor	Design/ Pre-construction/ Construction/ Post-construction							

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Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
Transportation											
SM TR-1, Traffic Control Plan. A Traffic Control Plan or TCP will be prepared for the Project. The goals of the TCP during Project construction will include minimizing traffic delay or time spent in queue; maintaining traffic flow throughout the Project area and the surrounding areas; and providing a safe environment for the work force, motorists, and pedestrians. The TCP will include traffic routing plans for vehicles and pedestrians, signage, and location of physical barricades to protect the work zone. The TCP will be prepared prior to any construction activities occurring on site and would be prepared by the contractor.	Section 2.17.3 IS/MND	IS/MND, Section 2.17.3	County/ Contractor	Design/ Construction							
Tribal Cultural Resources											
MM TCR-1. Due to the general sensitivity of the project area, the County of Riverside will retain a Native American Monitor to provide monitoring during ground-disturbing activities in areas of previously undisturbed and native soils. One Native American Monitor will be present during ground-disturbing activities in areas of previously undisturbed and native soils. If multiple tribes request to provide monitoring, tribal monitoring will be scheduled on an alternating basis between the Consulting Tribes. Tribal Monitors scheduled by the County will be compensated. In addition, if a tribe wishes to have a tribal representative onsite to observe ground-disturbing activities when its Tribal Monitor is not scheduled to work on the project, the tribe may do so at its own expense. The Native American Monitor will only be present onsite during construction that involves ground-disturbing activities such as, but not limited to, boring, grading, excavation, trenching, or drilling within previously undisturbed and native soils. Native American monitoring will not occur for work activities that include the demolition and removal of nonnative materials, such as existing concrete, asphalt pavement, and pavement base layers, or ground-disturbing activities that occur within previously disturbed areas. Attendance by Native American Monitors during construction of the project is at the discretion of the tribe, and the absence of a Native American Monitor, should the Tribes choose to forgo monitoring for	Section 2.18.3 IS/MND	IS/MND, Section 2.18.3	County/ Contractor	Design/ Construction							

Date: (6/4/2026) Project Phase: 1 ☒ PA&ED ☐ PS&E ☐ Construction	MITIGATION MONITORING AND REPORTING PROGRAM (Gilman Springs Road Bridge Replacement Project)										
Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
some reason, will not delay work. The Native American Monitor will complete daily monitoring logs that provide descriptions of construction activities, locations, soil, and any cultural materials identified. If a potential cultural resource is discovered, the Native American Monitor will immediately notify the archaeologist, construction foreman, and the County; and work will stop within 60 feet of the find. The Qualified Archaeologist, in cooperation with the Native American Monitor, will use flagging tape, rope, or some other means, as necessary, to delineate the area of the find, plus a 60-foot buffer, within which construction will halt. Native American monitoring will end when ground-disturbing activities that have potential to unearth or impact potential cultural resources are completed or the tribal monitor has indicated that all upcoming ground-disturbing activities will not affect TCRs.										
MM TCR-2. A tribal cultural resource (TCR) is a site, feature, place, cultural landscape, sacred place, or object that is of cultural value to a tribe and is either on or eligible for the California Register of Historic Resources or a local historic register, OR the Lead Agency, at its discretion, chooses to treat the resource as a TCR (See: PRC 21074 (a)(1)(A)-(B)). If a potential TCR is unexpectedly discovered during construction, as per PRC 21074(a)(2), the County will determine if the resource is a TCR pursuant to criteria set forth in subdivision (c) of Section 5024.1. If potential TCRs are discovered during construction, all work must halt within a 60-foot radius of the discovery. Any discovery is to be kept confidential and secure to prevent any further disturbance. There will be no publicity regarding any TCRs recovered. Isolates and clearly non-significant deposits will be documented in the field and collected so that monitored work can proceed. Otherwise, all potential TCRs unearthed by project construction activities will be evaluated by the Qualified Archaeologist in consultation with the Native American Monitor. Native American artifacts and finds suspected to be TCRs will be treated as such until the County has determined otherwise through consultation with consulting Tribes. The County, Caltrans, and consulting Tribes will determine mutually acceptable treatment of TCRs.	Section 2.18.3 IS/MND	IS/MND, Section 2.18.3	County/ Contractor	Construction							

Date: (6/4/2026) Project Phase: 1 ☒ PA&ED ☐ PS&E ☐ Construction	MITIGATION MONITORING AND REPORTING PROGRAM (Gilman Springs Road Bridge Replacement Project)										
Avoidance, Minimization, and/or Mitigation Measures	**Source**	**Environmental Analysis Source** (Technical Study, Environmental Document, and/or Technical Discipline)	**Responsible for Development and/or Implementation of Measure**	**Timing/Phase**	**If applicable, corresponding construction provision:** (standard, special, non-standard)	**Action(s) Taken to Implement Measure**	**Measure Completed (Date and Initials)**		**Remarks**	**Environmental Compliance**	
										YES	**NO**
Construction will not take place within the delineated area of the TCR until either 1) mitigation measures have been agreed on between the County and the AB52 consulting Tribes, pursuant to PRC Section 21080.3.2, and that mitigation is carried out; or 2) if agreement cannot be reached, one or more of the standard mitigation measures described in PRC Section 21084.3 is carried out.											
Utilities and Service Systems											
SM UT-1. During final design, relocation plans for any utilities that will potentially need to be relocated, removed, or protected in place will be prepared in consultation with the affected utility relocation providers/owners. If relocation is necessary, the final design will focus on relocating utilities within the ROW or other existing public ROWs and/or easements. For all utility relocation activities, the County will coordinate with affected utility owners regarding potential utility relocations and the affected utility owners will inform affected utility users in advance of the date and timing of potential service disruptions. If relocation outside of existing or additional public ROWs and/or easements required for the Project is necessary, the final design will focus on relocating those affected utilities.	Section 2.19.3 IS/MND	IS/MND, Section 2.19.3	County	Preconstruction							
SM UT-2. Prior to and during construction, the County shall ensure that the components of the utility plans provided in the Project specifications are properly implemented by the contractor.	Section 2.19.3, IS/MND	IS/MND, Section 2.19.3	County	Preconstruction/ Construction							

Appendix D Potential to Occur Table

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COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
PLANTS				
Chaparral Sand-Verbena (*Abronia villosa* var. *aurita*)	-/-/1B.1/-	This annual herb is found in sandy soil within coastal scrub, mostly on broad alluvial fans and benches. Elevation ranges from 262 feet (ft.) to 5,248 ft. It blooms from January through August. Known to occur in northern Orange County, western Riverside County, San Bernardino County, San Diego County, and southern Imperial County.	HP	Potentially suitable habitat is present in the sandy wash habitat (unvegetated stream channel and mulefat scrub) in the central portion of the biological study area (BSA). A record of occurrence for this species was reported in 2005 approximately 0.8 mi southwest of the BSA in sandy openings in river wash habitat. However, this species was not detected during rare plant surveys and is therefore considered absent from the BSA. No further constraint is present.
Yucaipa Onion (*Allium marvinii*)	-/-/1B.2/ MSHCP(b)	This perennial bulbiferous herb is found in clay soils within chaparral. Elevation ranges from 2,493 ft. to 3,494 ft. It blooms from April through May. Known to occur in the foothills of the San Bernardino Mountains near Beaumont and Calimesa.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation or soils needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is a Narrow Endemic Plant Species. The BSA lies outside of the MSHCP survey area for the species. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Munz's Onion (*Allium munzii*)	E/T/1B.1/ MSHCP(b)	This perennial bulbiferous herb is found on mesic exposures or seasonally moist microsites in grassy openings in coastal sage scrub, chaparral, juniper woodland, valley, and foothill grasslands in clay soils. Associated with a special "clay soil flora" found in southwestern Riverside County. At least one population (Bachelor Mountain) is reported to be associated with pyroxenite outcrops instead of clay. Elevation ranges from 975 ft. to 3,510 ft. It blooms from March to May.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is a Narrow Endemic Plant Species. The BSA lies outside of the MSHCP survey area for the species. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
San Diego Ambrosia (*Ambrosia pumila*)	E/-/1B.1/ MSHCP(b)	This perennial rhizomatous herb occurs in open floodplain terraces or in the margins of vernal pool watersheds at low elevations generally less than 1,600 ft. Associated with plant communities dominated by sparse non-native grasslands or ruderal habitat, chaparral, coastal scrub, vernal pools, and alkali playas. Blooming period is from April to October.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is a Narrow Endemic Plant Species. The BSA lies outside of the MSHCP survey area for the species. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Horn's Milk-Vetch (*Astragalus hornii* var. *hornii*)	-/-/1B.1/-	This annual herb is found near lake margins and alkaline soils in meadows, seeps, and playas. Elevation ranges from 195 ft. to 2,790 ft. This species blooms from May through October.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or alkaline soils needed for this species. This species is not expected to occur. No further constraint is present.
Borrego milk vetch (*Astragalus lentiginosus* var. *borreganus*)	-/-/4.3/-	This annual herb is found near Mojavean desert scrub and Sonoran desert scrub. Elevation ranges from 100 ft. to 2,935 ft. This species blooms from February to May.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present.
Coachella Valley Milk-vetch (*Astragalus lentiginosus* var. *coachellae*)	E/-/1B.2/-	This annual herb is found near lake margins and alkaline soils in meadows, seeps, and playas. Elevation ranges from 195 ft. to 2,790 ft. This species blooms from May through October.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or alkaline soils needed for this species. This species is not expected to occur. No further constraint is present.
Jaeger's Milk-vetch (*Astragalus pachypus* var. *jaegeri*)	-/-/1B.1/ MSHCP	This perennial shrub is found in sandy or rocky soil within chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Elevation ranges from 1,198 ft. to 3,199 ft. It blooms from December through June. Scarce and localized on steep sedimentary slopes in the San Jacinto Mountain foothills, Beaumont, Badlands, and near Vail Lake.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
				specific surveys are required and no further action is necessary.
San Jacinto Valley Crownscale (*Atriplex coronata* var. *notatior*)	E/-/1B.1/ MSHCP(d)	This annual herb is found in mesic and alkaline soils within playas, valley and foothill grassland, and vernal pools. Elevation ranges from 456 ft. to 1,640 ft. It blooms from April through August. Endemic to the alkaline flats of the San Jacinto River, Hemet, and the wetlands northwest of Lake Elsinore.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities, alkaline soils, or mesic areas needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.
Parish's Brittlescale (*Atriplex parishii*)	-/-/1B.1/ MSHCP(d)	This annual herb is found in alkaline soils within chenopod scrub, playas, and vernal pools. Elevation ranges from 82 ft. to 6,234 ft. It blooms from June through October. Occurs in alkaline flats along the San Jacinto River, west of Hemet, and near Winchester.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or alkaline soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.
Davidson's Saltscale (*Atriplex serenana* var. *davidsonii*)	-/-/1B.2/ MSHCP(d)	This annual herb is found in alkaline and sandy soils within coastal bluff scrub and coastal scrub. Elevation ranges from 33 ft. to 656 ft. It blooms from April through October.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or alkaline areas needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.
Thread-leaved Brodiaea (*Brodiaea filifolia*)	T/E/1B.1/ MSHCP(d)	This perennial bulbiferous herb is found in heavy soils (e.g., clay) in coastal sage scrub, chaparral, cismontane woodland, and vernal pools from 1,575 ft. to 4,000 ft. elevation. It blooms from March through June. Within western Riverside County, found in southern Santa Ana Mountains,	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. The project site is also just below the species' elevational range. This species is not expected to occur. No further constraint is present.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
		Santa Rosa Plateau, and alkali flats of the San Jacinto River flood plain and west of Hemet.		MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.
San Jacinto Mariposa-lily (*Calochortus palmeri* var. *munzii*)	-/-/1B.2/MSHCP	This perennial bulbiferous herb is found in chaparral, lower montane coniferous forest, and meadows and seeps. Elevation ranges from 2,805 ft. to 7,220 ft. This species blooms from April to July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Palmer's Mariposa-lily (*Calochortus palmeri* var. *palmeri*)	-/-/1B.2/-	This perennial bulbiferous herb occurs in mesic areas within chaparral, lower montane coniferous forest, and meadows and seeps at elevations ranging from 2,325 ft. to 7,840 ft. It blooms from April through July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic areas needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present.
Plummer's Mariposa Lily (*Calochortus plummerae*)	-/-/4.2/ MSHCP(e)	This perennial bulbiferous herb is found on rocky and sandy areas with granitic or alluvial material in coastal sage scrub, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grasslands. Elevation ranges from 295 ft. to 5,280 ft. This species blooms from May through July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: No suitable habitat for this species occurs within the BSA. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Intermediate Mariposa Lily (*Calochortus weedii* var. *intermedius*)	-/-/1B.2/ MSHCP	This perennial bulbiferous herb occurs in dry chaparral, valley grassland, and coastal sage scrub in sandy or clay soils. It is often on sandstone outcrops in areas from 590 ft. to 2,805 ft. elevation. The typical blooming period extends from May to July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Payson's Jewelflower (*Caulanthus simulans*)	-/-/4.2/MSHCP	This annual herb is found in sandy and granitic soils within chaparral and coastal shrub. Elevation ranges from 295 ft. to 7,218 ft. This species blooms from March through May, uncommonly in February and June. Uncommon in the eastern foothills, especially in the vicinity of Aguanga and Vail Lake.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Smooth Tarplant (*Centromadia pungens* ssp. *laevis*)	-/-/1B.1/ MSHCP(d)	This annual herb is found in association with fine or alkaline soils in seasonally wet chenopod scrub, meadows and seeps, playas, riparian woodland, fallow fields, drainage ditches, and moist situations within valley and foothill grasslands below 2,099 ft. in elevation. This species blooms from April through September.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Peninsular Spineflower (*Chorizanthe leptotheca*)	-/-/4.2/ MSHCP(e)	This annual herb is found in alluvial fan and granitic soils within chaparral, coastal scrub, and lower montane coniferous forest. Elevation ranges from 984 ft. to 6,234 ft. It blooms from May through August. Uncommon in alluvial benches at the base of the Santa Ana and Agua Tibia Mountains.	HP	Potentially suitable habitat is present in the Riversidian upland sage scrub habitat throughout the BSA. However, this species was not detected during the rare plant survey and is therefore considered absent from the BSA. No further constraint is present. MSHCP: No suitable habitat for this species occurs within the BSA. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Parry's Spineflower (*Chorizanthe parryi* var. *parryi*)	-/-/1B.1/ MSHCP(e)	This annual herb is found in sandy or rocky openings within coastal scrub, cismontane woodland, valley and foothill grassland, and chaparral habitats at elevations ranging from 902 ft. to 4,002 ft. The blooming period is from April through June. Occurs in the Santa Ana River Valley and Perris Basin.	HP	Potentially suitable habitat is present in the Riversidian upland sage scrub habitat throughout the BSA. A record of occurrence for this species was reported approximately 0.4 mi southeast of the BSA along a drainage in the San Jacinto Mountains. However, this species was not detected during the rare plant survey and is therefore considered absent from the BSA. No further constraint is present. MSHCP: No suitable habitat for this species occurs within the BSA. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Long-spined Spineflower (*Chorizanthe polygonoides* var. *longispina*)	-/-/1B.2/ MSHCP	This annual herb is found in clay soils within chaparral, coastal shrub, meadows and seeps, valley and foothill grassland, and vernal pools. Elevation ranges from 98 ft. to 5,020 ft. This species blooms from April through July. Occurs in the vicinity of Temecula, Lake Skinner, and the foothills of the Agua Tibia Mountains.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
White-bracted Spineflower (*Chorizanthe xanti* var. *leucotheca*)	-/-/1B.2/-	This annual herb is found in sandy or gravelly substrate within coastal scrub alluvial fans, Mojavean desert scrub, and pinyon and juniper woodland habitats. Elevation range is from 984 ft. to 3,937 ft. Blooming period is from April through June.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation needed for this species. This species is not expected to occur. No further constraint is present.
Mojave Tarplant (*Deinandra mohavensis*)	-/E/1B.3/ MSHCP(e)	This annual herb is found in mesic soils within chaparral, coastal scrub, and riparian scrub. Elevation ranges from 3,000 ft. to 5,249 ft. This species blooms from June through October, also uncommonly blooms in May and November through January. Primarily occurs in the San Jacinto Mountains.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic soils needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: No suitable habitat for this species occurs within the BSA. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Paniculate Tarplant (*Deinandra paniculata*)	-/-/4.2/-	This annual herb has a limited distribution with the species known from Orange, western Riverside, southwestern San Bernardino, and southwestern San Diego counties. It regularly grows in mesic conditions within sage scrub, valley and foothill grassland, and vernal pools but can also occur in dry nonnative grasslands. Elevation ranges from 80 ft. to 3085 ft. Blooming period is April through November.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic areas needed for this species. This species is not expected to occur. No further constraint is present.
Intermediate Larkspur (*Delphinium parishii* ssp. *subglobosum*)	-/-/4.3/-	This perennial herb is known to occur in chaparral, cismontane woodland, pinyon and juniper woodland, and Sonoran desert scrub. Elevation ranges from 1,970 ft. to 5,905 ft. The blooming period is from March to July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Mt. Pinos Larkspur (*Delphinium parishii* ssp. *purpureum*)	-/-/4.3/-	This perennial herb is known to occur in chaparral, Mojavean desert scrub, and pinyon and juniper habitats. It is found at elevations ranging from 3,280 ft. to 8,530 ft. The blooming period is from May through June.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present.
Cleveland's Bush Monkeyflower (*Diplacus clevelandii*)	-/-/4.2/-	This perennial rhizomatous herb is known to grow within gabbroic and rocky soils, often in openings and disturbed areas within chaparral, cismontane woodlands, and lower montane coniferous forests. Elevations range from 1,475 ft. to 6,560 ft and blooming typically occurs between April and July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present.
Slender-horned Spineflower (*Dodecahema leptoceras*)	E/E/1B.1/ MSHCP(b)	This annual herb is found on flood deposited fine sand terraces and washes in Riversidian alluvial fan sage scrub and is also associated with cismontane woodland and chaparral having suitable hydrology and fine sands. It is often associated with cryptogrammic soils. It is known from elevations ranging from 656 ft. to 2,493 ft. Its blooming period ranges from April through June. Occurs at San Jacinto River, Bautista Canyon, Temescal Valley (Indian Canyon), Arroyo Seco-Kolb Creek drainages, north base of Agua Tibia Mountains, and south of Vail Lake.	HP	Marginally suitable habitat is present in the sandy wash habitat (unvegetated stream channel and mulefat scrub) in the central portion of the BSA. However, this species was not detected during the rare plant survey and is therefore considered absent from the BSA. No further constraint is present. MSHCP: This species is a Narrow Endemic Plant Species. The BSA lies outside of the MSHCP survey area for the species. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Palomar Monkeyflower (*Erythranthe diffusa*)	-/-/4.3/-	This annual herb occurs in sandy or gravelly soils within chaparral and lower montane coniferous forests. It grows between 4,000 ft. to 6,005 ft. elevation and blooms between April and June.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
San Jacinto Mountains Bedstraw (*Galium angustifolium* ssp. *jacinticum*)	-/-/1B.3/ MSHCP(b)	This perennial herb is found in lower montane coniferous forest. Elevation ranges from 4,429 ft. to 6,890 ft. This species blooms from June through August.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is a Narrow Endemic Plant Species. The BSA lies outside of the MSHCP survey area for the species. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Alvin Meadow Bedstraw (*Galium californicum* ssp. *primum*)	-/-/1B.2/MSHCP	This perennial herb occurs in granitic to sandy soil in chaparral and lower montane coniferous forests. Elevations range from 4,428 ft. to 5,576 ft. Its blooming period is from May to July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Palmer's Grapplinghook (*Harpagonella palmeri*)	-/-/4.2/MSHCP	This annual herb is found within chaparral, coastal scrub, and valley and foothill grasslands. Often associated with clay soils. Occurs at elevations of 65 ft. to just over 3,130 ft. Blooming period is from March through May.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Graceful Tarplant (*Holocarpha virgata* ssp. *elongata*)	-/-/4.2/MSHCP	This annual herb occurs in chaparral, cismontane woodlands, coastal scrub, and valley and foothill grasslands. Elevations range from 15 ft. to 3,280 ft. and blooms from May to November. Known only in Riverside County from the Santa Rosa Plateau.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Vernal Barley (*Hordeum intercedens*)	-/-/3.2/MSHCP	This annual herb is found in mesic soils within coastal dunes, coastal scrub, valley and foothill grassland (in saline flats and depressions), and vernal pools. Elevation ranges from 16 ft. to 3,281 ft. This species blooms from March through June. Uncommon in the San Jacinto River floodplain and west of Hemet.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Mesa Horkelia (*Horkelia cuneata* ssp. *puberula*)	-/-/1B.1/-	This perennial herb grows in sandy and gravelly soils in chaparral, cismontane woodland, or coastal scrub at elevations from 230 ft. to 2,657 ft. It blooms from February through September.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Beautiful Hulsea (*Hulsea vestita* ssp. *callicarpha*)	-/-/4.2/MSHCP	This perennial herb is found in chaparral and lower montane coniferous forest. Its elevation ranges from 3,000 ft. to 10,005 ft. and it blooms from May to October.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
California Satintail (*Imperata brevifolia*)	-/-/2B.1/-	This perennial rhizomatous herb is found in mesic climates within chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub. Can occur up to 3,985 ft. elevation and it blooms between September and May.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present.
Southern California Black Walnut (*Juglans californica*)	-/-/4.2/MSHCP	This perennial deciduous tree is found in riparian woodland, chaparral, coastal scrub, and cismontane woodland habitats in alluvial soils at elevations ranging from 164 ft. to 2,953 ft. It blooms from March to August. Most frequent along the Santa Ana River near Riverside.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Coulter's Goldfields (*Lasthenia glabrata* ssp. *coulteri*)	-/-/1B.1/ MSHCP(d)	This wide-ranging annual herb is found in saline areas within coastal saltmarsh, inland playa, and vernal pool habitats at elevations ranging from sea level to 4,002 ft. It blooms from February through June. Common and sometimes abundant on seasonally flooded vernal alkali plains of the San Jacinto River and the Alberhill Creek wetlands, and less common near Hemet.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or saline areas needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.
Robinson's Pepper-Grass (*Lepidium virginicum* var. *robinsonii*)	-/-/4.3/-	This annual herb is found in dry soils in chaparral and coastal sage scrub openings at elevations ranging from sea level to 3,100 ft. Its blooming period is from January through July.	HP	Potentially suitable habitat is present in the sandy wash habitat (unvegetated stream channel and mulefat scrub) in the central portion of the BSA. However, this species was not detected during the rare plant survey and is therefore considered absent from the BSA. No further constraint is present.
Lemon Lily (*Lilium parryi*)	-/-/1B.2/ MSHCP(f)	This perennial bulbiferous herb is found in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest habitats in wet, mountainous terrain. It generally occurs in forested areas, on shady edges of streams and in open boggy meadows and seeps. Elevation ranges from 4,003 ft. to 9,006 ft. and it blooms from July to August.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: The BSA lies outside of Forest Service Land; therefore, there is no survey requirement. Any potential impacts to the species would be fully mitigated by the MSHCP. No further action is necessary.
Spiny-hair Blazing Star (*Mentzelia tricuspis*)	-/-/2B.1/-	This annual herb is found in sandy, gravelly slopes and washes within Mojavean desert scrub between 490 ft. to 4,200 ft in elevation. Blooming period is from March through May. Known from fewer than 20 extant occurrences.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Small-flowered Microseris (*Microseris douglasii* ssp. *platycarpha*)	-/-/4.2/ MSHCP(e)	This annual herb is found in clay soils in cismontane woodlands, coastal scrub, valley and foothill grasslands, and vernal pools. Elevations range from 45 ft. to 3,510 ft. and its bloom period is from March through May.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: No suitable habitat for this species occurs within the BSA. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Hall's Monardella (*Monardella macrantha* ssp. *hallii*)	-/-/1B.3/ MSHCP	This perennial rhizomatous herb is found within broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland. Elevation ranges from 2,395 ft. to 7,201 ft. This species blooms from June through October. Uncommon on north-facing slopes in the Santa Ana and Agua Tibia Mountains.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
San Felipe Monardella (*Monardella nana* ssp. *leptosiphon*)	-/-/1B.2/-	This perennial rhizomatous herb is found in chaparral and lower montane coniferous forest. Elevation ranges from 3,935 ft. to 6,085 ft. This species blooms from June to July.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Little Mousetail (*Myosurus minimus* ssp. *apus*)	-/-/3.1/ MSHCP(d)	This annual herb is found in alkaline soils within valley and foothill grassland and vernal pools. Elevation ranges from 66 ft. to 2,100 ft. This species blooms from March through June. Locally common in the alkaline vernal pools near Hemet, and scarce in Perris Basin and Santa Rosa Plateau.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or alkaline soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.
Mud Nama (*Nama stenocarpa*)	-/-/2B.2/ MSHCP(d)	This annual/perennial herb is found in marshes, swamps, lake margins, and riverbanks. Elevation ranges from 16 ft. to 1,640 ft. This species blooms from January through July. Scarce, known only from the northern shores of Mystic Lake.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic areas needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.
Spreading Navarretia (*Navarretia fossalis*)	T/-/1B.1/ MSHCP(d)	This annual herb is found within chenopod scrub, marshes and swamps, playas, and vernal pools. Elevation ranges from 98 ft. to 2,149 ft. This species blooms from April through June. Sometimes common in vernally wet areas along the San Jacinto River in the Lakeview-Perris area, vernal plains west of Hemet, and alkali wetlands near Elsinore. Scarce elsewhere in Perris Basin and Santa Rosa Plateau.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic areas needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: The project is not within a Criteria Area for this species, thus any potential impacts to this species would be fully covered by the MSHCP.

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California Orcutt Grass (*Orcuttia californica*)	E/E/1B.1/ MSHCP(b)	This annual herb is restricted to the deeper portions of undisturbed vernal pools. In Riverside County, this species is found in southern basaltic claypan vernal pools at the Santa Rosa Plateau and alkaline vernal pools as at Skunk Hollow and at Salt Creek west of Hemet. Its elevation ranges from 50 ft. to 2,165 ft. and it blooms between April and August.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is a Narrow Endemic Plant Species. The BSA lies outside of the MSHCP survey area for the species. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
Little-leaved Palo Verde (*Parkinsonia microphylla*)	-/-/4.3/-	This perennial deciduous shrub is found in Mojavean desert scrub that is typically gravelly or rocky. Its elevation ranges from 150 ft. to 3,510 ft. and it blooms from April to May.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present.
California Beardtongue (*Penstemon californicus*)	-/-/1B.2/MSHCP	This perennial herb is found in sandy soils within chaparral, lower montane coniferous forests, and pinyon and juniper woodlands between 3,835 ft. and 7,545 ft. Typically flowers between May and June, though can flower as late as August.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Narrow-leaf Sandpaper-plant (*Petalonyx linearis*)	-/-/2B.3/-	This perennial shrub is found in Mojavean desert scrub and Sonoran desert scrub within rocky microhabitats. Its elevation ranges from -80 ft. to 3,660 ft. It typically blooms from March to May.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present.

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White Rabbit-tobacco (*Pseudognaphalium leucocephalum*)	-/-/2B.2/-	This perennial herb is found in dry, sandy creek bottoms within chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats, often in sandy or gravelly soils. Appears restricted to the sandy margins of washes or with debris cones feeding from steep canyons, and natural, seasonal hydrology. Elevations range from sea level to 6,890 ft. Its blooming period is typically from August to November, sometimes blooming as early as July and as late as December.	HP	Potentially suitable habitat is present in the sandy wash habitat (unvegetated stream channel and mulefat scrub) in the central portion of the BSA. However, this species was not detected during the rare plant survey and is therefore considered absent from the BSA. No further constraint is present.
Engelmann Oak (*Quercus engelmannii*)	-/-/4.2/MSHCP	This perennial deciduous tree is found in chaparral, cismontane woodlands, riparian woodlands, and valley and foothill grasslands. Elevations range from 160 ft. to 4,265 ft. and flowers bloom from March to April. Protected in part of the Santa Rosa Plateau Reserve in Riverside County.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Latimer's Woodland-gilia (*Saltugilia latimeri*)	-/-/1B.2/-	This annual herb is found in chaparral, Mojavean desert scrub, and pinyon and juniper woodland habitats in rocky or sandy, often granitic, soils and occasionally washes. Elevations range from 1,310 ft. to 6,235 ft. Blooming period is from March through June.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or soils needed for this species. This species is not expected to occur. No further constraint is present.
Southern Mountains Skullcap (*Scutellaria bolanderi* ssp. *austromontana*)	-/-/1B.2/-	This perennial herb is found in mesic climates within chaparral, cismontane woodlands, and lower montane coniferous forests. Occur at elevations from 1,390 ft. to 6,560 ft. and blooms between June and August.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic areas needed for this species. This species is not expected to occur. No further constraint is present.

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Salt Spring Checkerbloom (*Sidalcea neomexicana*)	-/-/2B.2/-	This perennial herb is associated with alkaline meadows and is typically found associated with salt grass (*Distichlis spicata*). Elevations range from 49 ft. to 5,018 ft. and it blooms from March through June. Found thinly scattered throughout southern California, including the counties of Los Angeles, Ventura, Orange, and Riverside as well as Baja California. Within Riverside County, species is scarce and tied to alkaline seeps and springs; perhaps extirpated.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or alkaline areas needed for this species. This species is not expected to occur. No further constraint is present.
Chickweed Oxytheca (*Sidotheca caryophylloides*)	-/-/4.3/MSHCP	This annual herb is found in lower montane coniferous forest with sandy openings. This species' elevation ranges from 3,655 ft. to 8,530 ft. It blooms from July to September.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Laguna Mountains Jewelflower (*Streptanthus bernardinus*)	-/-/4.3/-	This perennial herb is found in chaparral and lower montane coniferous forest. Elevation ranges from 2,200 ft. to 8,205 ft. It blooms from May to August.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species and the project site is outside of the species' elevational range. This species is not expected to occur. No further constraint is present.

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San Bernardino Aster (*Symphyotrichum defoliatum)*	-/-/1B.2/-	This perennial rhizomatous herb is found in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland and also near ditches and stream springs. Elevations ranges from 6 ft. to 6,700 ft. and blooms from July to November.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic areas needed for this species. This species is not expected to occur. No further constraint is present.
California Screw Moss (*Tortula californica*)	-/-/1B.2/-	This moss occurs in sandy soil in chenopod scrub and valley and foothill grassland. Elevation range of 33 ft. to 4,790 ft.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities needed for this species. This species is not expected to occur. No further constraint is present.
Wright's Trichocoronis (*Trichocoronis wrightii* var. *wrightii*)	-/-/2B.1/ MSHCP(b)	This annual herb is found in meadows and seeps, marshes and swamps, riparian forest, and alkaline vernal pools. Elevation ranges from 16 ft. to 1,427 ft. This species blooms from May through September. May be abundant in seasonally inundated areas with muddy substrate along the San Jacinto River.	HA	No suitable habitat for this species is present in the BSA. The BSA does not support the vegetation communities or mesic areas needed for this species. This species is not expected to occur. No further constraint is present. MSHCP: This species is a Narrow Endemic Plant Species. The BSA lies outside of the MSHCP survey area for the species. Therefore, no MSHCP-specific conservation requirements are necessary and no further action is required.
INVERTEBRATES				
Crotch Bumble Bee (*Bombus crotchii*)	-/SC/-/-	Generally inhabits grasslands and scrublands and nests underground. In the winter this species probably inhabits soft, disturbed soil or winters under leaf litter or other loose debris. Utilizes plants in the genera *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

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Vernal Pool Fairy Shrimp (*Branchinecta lynchi*)	T/-/-/MSHCP(a)	Restricted to seasonal vernal pools and prefers cool-water pools that have low to moderate dissolved solids. These vernal pools are unpredictable and often short lived.	HA	There are no vernal pools or other suitable depressional features within the BSA that would contain standing water long enough to support this species. No further constraint is present. MSHCP: Surveys may be required for this species under the MSHCP if suitable wetland habitat is present. However, no suitable habitat was found and therefore this species is considered absent from the BSA and no further action is necessary.
Monarch Butterfly (*Danaus plexippus*)	PT/-/-/-	Overwintering groves trees include Monterey pine (*Pinus radiata*), Monterey cypress (*Cupressus macrocarpa*), Coast redwood (*Sequoia sempervirens*), coast live oak (*Quercus agrifolia*), Douglas fir (*Pseudotsuga menzesii*), Torrey pine (*Pinus torreyana*), western sycamore (*Platanus racemosa*), bishop pine (*Pinus radiata*) and others. Monarchs are reliant on milkweeds (*Asclepias* spp.) as host plants for caterpillars and adults require a diverse range of flowers for nectar as fuel during breeding.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Quino Checkerspot Butterfly (*Euphydryas editha quino*)	E/-/-/MSHCP	Habitat associations seem to be tied to both host plant species and topography. Larvae feed on *Plantago erecta*, *Plantago patagonia*, *Antirrhinum coulterianum*, *Cordylanthus rigidus* (and possibly other *Plantago* species), *Collinsia concolor*, and *Castilleja exserta*. Adults nectar mostly on small annuals; often occur on open or sparsely vegetated rounded hilltops, ridgelines, and occasionally rocky outcrops. Habitat components have been found in association with, but not restricted to, vernal pools, sage scrub, chaparral,	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

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		native and nonnative grassland, and open oak and juniper woodland communities. The key component seems to be open-canopied habitats.		
Riverside Fairy Shrimp (*Streptocephalus wootoni*)	E/-/-/MSHCP(a)	Found in shallow depressions containing a clay hard pan soil layer. Discontinuously distributed along coastal southern California and northern Baja California.	HA	There are no vernal pools or other suitable depressional features within the BSA that would contain standing water long enough to support this species. No further constraint is present. MSHCP: Surveys may be required for this species under the MSHCP if suitable wetland habitat is present. However, no suitable habitat was found and therefore this species is considered absent from the BSA and no further action is necessary.
AMPHIBIANS				
Arroyo Toad (*Anaxyrus californicus*)	E/CSC/-/ MSHCP(c)	Found in rivers with willows, cottonwoods, and sycamores. This species prefers sandy/gravelly areas in drier parts of its range near washes or intermittent streams with clear standing water that is required for egg deposition.	HA	No suitable habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain pools or a long-lasting water source to support this species. No further constraint is present. MSHCP: The project occurs outside of the MSHCP survey area for this species. No MSHCP-specific surveys are required and no further action is necessary.
Southern Mountain Yellow-legged Frog (*Rana muscosa*)	E/E/-/ MSHCP(c)	This frog inhabits lakes, meadow streams, isolated pools, and sunny riverbanks in the Sierra Nevada Mountains and Transverse Ranges from 1,210 ft. to 12,010 ft. elevation. Occurs in open stream and lake edges; a gentle slope up to a depth of 2-3 inches seems to be preferred. Rarely occurs where predatory fishes have been introduced. Always encountered within a few feet of water.	HA	No suitable habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain pools or a long-lasting water source to support this species. No further constraint is present. MSHCP: The project occurs outside of the MSHCP survey area for this species. No MSHCP-specific surveys are required and no further action is necessary.

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Western Spadefoot (*Spea hammondii*)	PT/CSC/-/ MSHCP	This toad is found primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools and seasonal ponds are essential for breeding and egg laying. It is found at sea level to 4,500 ft. in elevation.	HA	No suitable habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain pools or a long-lasting water source to support this species. Although there are records of this species within the project region, they are located further upstream in areas with more water and streamside vegetation. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
REPTILES				
Southwestern Pond Turtle (*Actinemys pallida*)	PT/CSC/-/ MSHCP	This turtle is found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking.	HA	No suitable riverine habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain a long-lasting water source or basking habitat to support this species. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Southern California Legless Lizard (*Anniella stebbinsi)*	-/CSC/-/-	Habitat is primarily areas with sandy or loose loamy soils under the sparse vegetation of beaches, chaparral, or pine-oak woodland, and open, well-shaded terraces in mature riparian natural communities. Leaf litter is commonly present. Soil disturbances such as agriculture and mining, as well as requirements for soil moisture and relatively cool microclimates limit	HP	Marginally suitable habitat to support this species occurs within the BSA. Sandy and loose soils are present, but there are no well-shaded terraces or mature riparian communities, which may preclude this species from occurring.

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		distribution, and account in part for local declines and extirpations.		
California Glossy Snake (*Arizona elegans occidentalis*)	-/CSC/-/-	This snake inhabits arid scrub, rocky washes, grasslands, and chaparral. Elevation ranges from below sea level to 7,218 ft.	HP	Marginally suitable habitat occurs within the BSA. Sandy, loose soils, which the snake may use for burrowing, and arid scrub and wash habitat are present within the BSA.
Orange-throated Whiptail (*Aspidoscelis hyperythra*)	-/WL/-/MSHCP	This whiptail occurs in semi-arid bushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral. Elevation ranges from sea level to 2,000 ft.	HP	Suitable habitat is present within the Riversidian upland sage scrub habitat, specifically on rocky slopes on the northeast side of the BSA. There are records of occurrence for this species within the project area, including Massacre Canyon to the north along Potrero Creek. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Coastal Whiptail (*Aspidoscelis tigris stejnegeri*)	-/CSC/-/ MSHCP	This whiptail occurs in a wide variety of habitats in coastal and inland valleys and foothills, including coastal sage scrub, sparse grassland, and riparian woodland, in areas with sparse vegetation and open areas. Found from Ventura County to Baja California.	HP	Suitable habitat is present within the Riversidian upland sage scrub habitat throughout the BSA. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Southern Rubber Boa (*Charina umbratica*)	-/T/-/MSHCP	Occurs in a variety of montane forest habitats and montane chaparral and wet meadow habitat between roughly 5,000 ft. to 8,200 ft. Typically found near streams or wet meadows. Species requires moist loose soil for burrowing. Has also been known to find cover in rotting logs. Limited to San Bernardino and San Jacinto mountains.	HA	No suitable montane forest habitat is present, and the BSA is outside of the species' typical elevational range. This species is not expected to occur. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
				specific surveys are required and no further action is necessary.
San Diego Banded Gecko (*Coleonyx variegatus abbotti*)	-/CSC/-/-	Occurs in a wide variety of sage scrub and chaparral habitats where suitable cover exists. Associated with granite outcrops and boulder fields where there is also ground debris.	HP	Low to moderately suitable habitat for this species is present within the BSA outside of the project limits of disturbance in rocky areas within the Riversidian upland sage scrub habitat north of Gilman Springs Road.
Red-diamond Rattlesnake (*Crotalus ruber*)	-/CSC/-/ MSHCP	This rattlesnake inhabits arid scrub, coastal chaparral, oak and pine woodlands, rocky grassland, and cultivated areas.	HP	Suitable habitat is present within the arid Riversidian upland sage scrub habitat located throughout the BSA. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Blainville's (Coast) Horned Lizard (*Phrynosoma blainvillii*)	-/CSC/-/ MSHCP	This horned lizard inhabits open areas of sandy soil and low vegetation in valleys, foothills, and semiarid 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, and frequently found near ant hills. Elevation ranges from sea level to 8,000 ft.	HP	Suitable habitat is present within the BSA in the sandy wash associated with Potrero Creek. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
BIRDS				
Cooper's Hawk (*Accipiter cooperii*)	-/WL/-/MSHCP	This raptor occurs in mature forest, open woodlands, wood edges, and river groves. Nests in coniferous, deciduous, and mixed woods, typically those with tall trees and with openings or edge habitat nearby. Also found along trees along rivers through open country, and increasingly in suburbs and cities where some tall trees exist for nest sites. In winter may be in fairly open	Foraging: HP Nesting: HA	Suitable foraging habitat is present within the BSA in the form of open habitat near the edge of the Massacre Canyon foothills and Gilman Springs Road. No suitable nesting habitat is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
		country, especially in the west. Nest site is in trees, either deciduous or coniferous, usually 25 ft. to 50 ft. above the ground. Often placed on top of some pre-existing foundation, such as the old nest of a large bird or squirrel, or a clump of mistletoe.		specific surveys are required and no further action is necessary.
Tricolored Blackbird (*Agelaius tricolor*)	-/T/-/ MSHCP	This blackbird occurs in open country in western Oregon, California, and northwestern Baja California. Breeds near freshwater, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow (*Salix* spp.), blackberry (*Rubus* spp.), wild rose (*Rosa* spp.), tall herbs and forages in grassland and cropland habitats. Seeks cover for roosting in emergent wetland vegetation, especially cattails (*Typha* spp.) and tules (*Scirpus* spp.), and also in trees and shrubs.	Foraging: HA Nesting: HA	No suitable wetland or marsh habitats are present in the BSA. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)	-/WL/-/MSHCP	This sparrow occurs in grassy or rocky slopes with sparse low bushes, and open pine-oak woods. Habitat varies in different parts of range, but always in brushy areas. In Southwest, usually in rocky areas of foothills and lower canyons, in understory of pine-oak woods, or in chaparral or coastal scrub.	Foraging: P Nesting: HP	Suitable nesting habitat is present within the Riversidian upland sage scrub, specifically adjacent to canyon slopes on the northeastern side of the BSA. This species was detected within the BSA during the burrowing owl focused surveys. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

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Golden Eagle (*Aquila chrysaetos*)	BAGEA/FP/-/MSHCP	This raptor forages in grassland and open savannah of many types. It tolerates considerable variation in topography and elevation. It prefers to hunt moderate-sized prey, especially California Ground Squirrels (*Spermophilus beecheyi*) and rabbits, but will occasionally take larger prey, such as mule deer (*Odocoileus hemionus*) fawns. Nests on cliffs of all heights, and occasionally in large trees in open areas, in rugged, open habitats with canyons and escarpments. It is very sensitive to human disturbance, especially near nest sites.	Foraging: HP Nesting: HA	Suitable foraging habitat occurs within the scrubland portions of the BSA adjacent to Massacre Canyon. Suitable nesting habitat does not exist within the BSA. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Bell's (Sage) Sparrow (*Artemisiospiza belli belli*)	-/WL/-/MSHCP	This sparrow occurs in coastal sage scrub, chaparral; in winter, also deserts. Found year-round in unique sage scrub habitat on the California coastal slope and foothills. In the interior, also breeds in saltbush, chamise, and other low shrubs of arid flats. In winter some spread eastward into open flats and deserts with scattered brush.	Foraging: HP Nesting: HP	Suitable nesting habitat is present within the Riversidian upland sage scrub, specifically on rocky slopes on the northeastern side of the BSA. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Burrowing Owl (*Athene cunicularia*)	-/SC, CSC/-/ MSHCP(c)	This owl inhabits open, dry, nearly or quite level, grassland, prairie, desert floor, and shrubland habitats. Areas should be considered potential habitat if shrub cover is below 30%. In coastal southern California, a substantial fraction of birds are found in microhabitats highly altered by man, including flood control and irrigation basins, dikes, and banks, abandoned fields surrounded by agriculture, and road cuts and margins. There is a strong association between Burrowing Owls and burrowing mammals,	Foraging: A Nesting: A	Suitable habitat is present and a few potential burrow sites were detected within the BSA. However, focused surveys in August 2022 were negative; therefore, this species is considered absent. MSHCP: The project occurs within the MSHCP Survey Area for this species. As such, MSHCP-specific surveys are required.

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		especially ground squirrels (*Spermophilus* spp.); however, they will also occupy man-made niches such as banks and ditches, piles of broken concrete, and even abandoned structures.		
Ferruginous Hawk (*Buteo regalis*)	-/WL/-/MSHCP	This raptor occurs in plains and prairies. Found at all seasons in very open and dry country. Inhabits dry grassland, sagebrush plains, saltbush and greasewood flats, rangeland, and desert. In winter, also in agricultural country, including over plowed fields. Nest site is usually in top of tree, 20 ft. to 50 ft. above the ground, but can be as low as 6 ft. (available trees may be very short). Sometimes nests on a cliff or on the ground.	Foraging: HP Nesting: HA	Potentially suitable foraging habitat is present over open, arid scrubland throughout the BSA. No suitable nesting habitat is present within the BSA. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Coastal Cactus Wren (*Campylorhynchus brunneicapillus sandiegensis*)	-/CSC/-/ MSHCP	This wren is a non-migratory, obligate resident within a subset of coastal sage scrub habitats; require the presence of, but are not entirely restricted within, relatively arborescent (over 3 ft. tall) stands of several species of cactus (*Opuntia* spp.).	Foraging: HP Nesting: HP	Marginally suitable habitat is present within the BSA. *Opuntia* stands are present along the slope in the northwestern portion of the BSA. However, the cactus is not very large (generally less than or equal to two feet tall) and is relatively sparse; surrounding shrub cover is tall and dense relative to the cactus. This species has a low potential to occur. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

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Northern Harrier (*Circus hudsonius*)	-/CSC/-/MSHCP	Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Hunts low to the ground mostly in open country, nesting on the ground. Formerly a fairly common breeder in much of coastal southern California, but now is nearly extirpated in this role due to loss of native open habitats, especially marshes. Remains fairly common in open country with low human disturbance during migration and in winter. Prey diversity is high, though small mammals are most commonly taken.	Foraging: HA Nesting: HA	No suitable meadow, grassland or rangeland habitat or open areas adjacent to marshes or water are present within the BSA. No suitable nesting habitat is present. This species is not expected to occur. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Western Yellow-billed Cuckoo (*Coccyzus americanus occidentalis*)	T/E/-/ MSHCP(a)	This cuckoo breeds and nests in extensive stands of dense cottonwood/willow riparian forest along broad, lower flood bottoms of larger river systems at scattered locales in western North America. Winters in South America.	Foraging: HA Nesting: HA	No suitable riparian habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain mature riparian forest habitat to support this species. No further constraint is present. MSHCP: This species is a Riparian/Riverine Area and Species-Specific Objectives species. No suitable habitat is present within the BSA. Therefore, there is no MSHCP-survey requirement and no further action is necessary.
Black Swift (*Cypseloides niger*)	-/CSC/-/ MSHCP	This swift occurs in open sky over mountains and coastal cliffs. This species forages widely over any kind of terrain but is still very local in its occurrence, probably limited to regions with suitable nesting sites. Nest site is on a ledge sheltered by overhang or in a protected crevice on a cliff, along the rocky coast or in mountainous country. Mountain nest sites are often behind waterfalls, in spots	Foraging: HA Nesting: HA	Mountains, cliffs, and waterfalls are absent from the BSA, and suitable habitat does not exist. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

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		where nest is continuously damp from spray.		
White-tailed Kite (*Elanus leucurus*)	-/FP/-/MSHCP	This raptor hunts in open country. This is a strongly lowland species, apparently rare anywhere in California above 2,000 ft. Nests are flimsy and are located low in trees and large shrubs near foraging areas in savannahs and at edges between open habitat and woodland or forest areas. Its diet is largely restricted to small mammals such as voles and mice.	Foraging: HP Nesting: HP	Suitable foraging habitat is present within the BSA in the form of open, arid scrublands to the west of Gilman Springs Road. A few mature trees are present that could provide suitable nesting habitat. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)	E/E/-/ MSHCP(a)	This flycatcher has a highly restricted distribution in southern California as a breeder. It occupies extensive riparian forests, wet meadows, and lower montane riparian habitats primarily below 4,000 ft. Occurs in riparian habitats along rivers, streams, or other wetlands, where dense growths of willows, *Baccharis* spp., arrowweed (*Pluchea* spp.), buttonbush (*Cephalanthus* spp.), tamarisk (*Tamarix* spp.), Russian olive (*Eleagnus* spp.), or other plants are present, often with a scattered overstory of cottonwood (*Populus* spp.).	Foraging: HA Nesting: HA	No suitable riparian or wetland habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain riparian habitat that is mature, dense, or extensive enough to support this species. No further constraint is present. MSHCP: This species is a Riparian/Riverine Area and Species-Specific Objectives species. No suitable habitat is present within the BSA. Therefore, there is no MSHCP-survey requirement and no further action is necessary.
California Horned Lark (*Eremophila alpestris actia*)	-/WL/-/MSHCP	This lark occurs in prairies, fields, airports, and shores. Inhabits open ground, generally avoiding areas with trees or even bushes. May occur in a wide variety of situations that are sufficiently open: short-grass prairies, extensive lawns (as on airports or golf courses), plowed fields, stubble fields, beaches, lake flats, or high mountains.	Foraging: HP Nesting: HP	Potentially suitable habitat for this species to forage or nest is present in the open areas surrounding Potrero Creek. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

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Yellow-breasted Chat (*Icteria virens*)	-/CSC/-/ MSHCP	This chat nests in low thickets in dense riparian habitats. It eats a variety of invertebrates. It is a local and uncommon breeder and rare migrant across southern California.	Foraging: HA Nesting: HA	No suitable riparian habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain riparian habitat that is mature, dense, or extensive enough to support this species. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Loggerhead Shrike (*Lanius ludovicianus*)	-/CSC/-/ MSHCP	This shrike nests in broken woodlands, savannah, pinyon-juniper, Joshua tree, riparian woodlands, desert oasis scrub, and washes. Prefers open country for hunting, with perches for scanning and fairly dense shrubs and brush for nesting.	Foraging: HP Nesting: HP	Potentially suitable nesting habitat is present in the Riversidian upland sage scrub areas throughout the BSA. Suitable foraging habitat occurs in scrub habitat and along the Potrero Creek wash. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
White-faced Ibis (*Plegadis chihi*)	-/WL/-/MSHCP	This ibis occurs in fresh marshes, irrigated land, and tules. For foraging, favors very shallow water, as in marshes, flooded pastures, and irrigated fields. Sometimes in damp meadows with no standing water. Prefers fresh water marsh, but sometimes forages in salt marsh. Breeds in colonies. Nest site is usually in dense marsh growth (such as bulrush or cattails) or in low shrubs or trees above water, sometimes on ground on islands.	Foraging: HA Nesting: HA	No wetlands are present within the BSA, and suitable foraging and nesting habitat do not exist. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

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Coastal California Gnatcatcher (*Polioptila californica californica*)	T/CSC/-/ MSHCP	This gnatcatcher is a year-round obligate, permanent resident of coastal sage scrub vegetation on mesas, arid hillsides, and in washes. Nests almost exclusively in California sagebrush. Occurs in low-lying foothills and valleys in cismontane southwestern California and Baja California.	Foraging: HP Nesting: HP	Suitable nesting and foraging habitat to support this species is present within the Riversidian upland sage scrub habitat in the BSA. Records of occurrence have frequently reported this species within Massacre Canyon and the surrounding project area, including breeding pairs. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Purple Martin (*Progne subis*)	-/CSC/-/ MSHCP	This swallow occurs in towns, farms, semi-open country near water, and mountain forest. Nests in isolated colonies around woodland edges and clearings in mountain forest. Natural sites are in cavities, mostly old woodpecker holes, in trees.	Foraging: HP Nesting: HP	Marginally suitable habitat is present within the BSA and surrounding area. The small pond south of the BSA may attract this species to the area and mature trees onsite may contain cavities for nesting. There is a low potential for this species to occur. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Yellow Warbler (*Setophaga petechia*)	-/CSC/-/ MSHCP	This warbler nests in the upper story of riparian habitats in southern California. It is also a common, widespread migrant in spring and fall, occupying a wide variety of habitats at that time.	Foraging: HA Nesting: HA	No suitable riparian habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain riparian habitat that is mature, dense, or extensive enough to support this species. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.

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LeConte's Thrasher (*Toxostoma lecontei*)	-/CSC/-/-	Desert resident that inhabits sparsely vegetated flats, dunes, washes, alluvial fans, or gently rolling hills in desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats with a high cover of *Atriplex* or *Opuntia*.	Foraging: HA Nesting: HA	While the BSA is characterized as a sandy wash with desert scrub habitat, it is lacking high cover of *Atriplex* or *Opuntia* to support this species, and no records of this species occur in the area. No further constraint is present.
Least Bell's Vireo (*Vireo bellii pusillus*)	E/E/-/ MSHCP(a)	This vireo is found as a summer resident of southern California where it inhabits low riparian growth in the vicinity of water or in dry river bottoms below 2,000 ft. This species selects dense vegetation low in riparian zones for nesting; most frequently located in riparian stands between 5 and 10 years old; when mature riparian woodland is selected, vireos nest in areas with a substantial robust understory of willows, as well as other plant species.	Foraging: HA Nesting: HA	No suitable riparian habitat occurs within the BSA. The portion of Potrero Creek within the BSA is ephemeral and does not contain riparian habitat that is mature, dense, or extensive enough to support this species. Although an individual least Bell's vireo was incidentally detected vocalizing during the field surveys, it was located in a patch of willows outside of the 500-foot BSA buffer. Suitable habitat for this species does exist within the project region, but not within the BSA. No further constraint is present. MSHCP: This species is a Riparian/Riverine Area and Species-Specific Objectives species. No suitable habitat is present within the BSA. Therefore, there is no MSHCP-survey requirement and no further action is necessary.
Yellow-headed Blackbird (*Xanthocephalus xanthocephalus*)	-/CSC/-/-	This blackbird forages around marshes and also commonly in open pastures, plowed fields, cattle pens, and feedlots. Breeds in freshwater sloughs, marshy lake borders, and tall cattails growing in water up to 3 ft. to 4 ft. deep.	Foraging: HA Nesting: HA	There is no suitable marsh or open pasture habitat within the BSA. This species is not expected to occur. No further constraint is present.

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MAMMALS				
Pallid Bat (*Antrozous pallidus*)	-/CSC/-/-	Occurs throughout southern California. from the coast to mixed conifer forest; grasslands, shrublands, woodlands, and forest; most common in open, dry habitats with rocky areas for roosting; yearlong resident in most of range. The species is not thought to migrate so maternity colonies and winter roosts are expected to occur in vicinity of each other; roost sites are rock crevices, old buildings, bridges, caves, mines, and hollow trees.	HP	Suitable foraging habitat occurs throughout the BSA, and suitable roosting habitat is present at the Gilman Springs Road Bridge over Potrero Creek.
Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*)	-/-/-/MSHCP	This pocket mouse occurs in sandy herbaceous areas, usually in association with rocks and course gravel in southwest California- coastal and desert border areas in San Bernardino, Riverside, and San Diego counties. Elevation ranges from sea level to 6,000 ft. Vegetation community preferences include sage scrub, chamise-redshank chaparral, mixed chaparral, sage brush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland.	HP/P	Suitable habitat is present in the Riversidian upland sage scrub and unvegetated stream channel portions of the BSA. This species was determined to be present in the BSA during the small mammal trapping surveys performed in November 2023. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Townsend's Big-eared Bat (*Corynorhinus townsendii*)	-/CSC/-/-	Found throughout California in coastal areas, valleys, deserts, foothills, and mid-elevation montane forest. The occurrence of the species is highly correlated with availability of caves and cave-like roosting habitat (such as cavity forming rocks, abandoned mines, buildings, bridges, water diversion tunnels, and hollow trees). Temperature and humidity are very important factors in occupation of potentially suitable habitat.	HP (foraging only)	Suitable foraging habitat is present throughout the BSA. The BSA lacks large cavities for roosting to support this species, such as caves, abandoned mines, and buildings. The bridge onsite does not have the proper structure to provide the needed cavity-like conditions. In addition, this species tends to prefer roosts with little disturbance by humans, and the Gilman Springs Road Bridge over Potrero Creek showed signs of regular human disturbance (e.g., lots of graffiti, trash).

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San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)	E/E/-/ MSHCP(c)	This kangaroo rat prefers soils of sandy loam, occasionally to sandy gravel, in open to moderately shrubby habitats, especially intermediate seral stages of alluvial fan sage scrub up to 1,970 ft. from active channels.	A	Suitable habitat is present in the Riversidian upland sage scrub and unvegetated stream channel portions of the BSA. However, small mammal trapping surveys performed in November 2023 were negative for this species and it is presumed absent from the BSA. No further constraint is present. MSHCP: A few acres within the MSHCP survey area for this species are located along the east end of the BSA. As such, MSHCP-specific surveys are required.
Stephens' Kangaroo Rat (*Dipodomys stephensi*)	T/T/-/MSHCP	This kangaroo rat is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50% during the summer. Avoids dense grasses and is more likely to inhabit areas where the annual forbs disarticulate in the summer and leave more open areas. Typically found in sandy and sandy loam soils with low clay to gravel content for burrowing; will sometimes utilize the burrows of other mammals. Tends to avoid rocky soils. In general, the highest abundances of species occur on gentle slopes less than 15%.	A	Suitable habitat is present in the Riversidian upland sage scrub and unvegetated stream channel portions of the BSA. However, small mammal trapping surveys performed in November 2023 were negative for this species and it is presumed absent from the BSA. No further constraint is present. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Western Yellow Bat (*Lasiurus xanthinus)*	-/CSC/-/-	Occurs from southern California and western Arizona south into Mexico. Apparently non-colonial and non-hibernating. Roosts primarily in the untrimmed, dead fronds of fan palms (native and nonnative) but will also use other trees including cottonwoods. Possible for both seasonal movement and year-round residence. Foraging is	HP	Suitable foraging habitat occurs throughout the BSA, and suitable roosting habitat is present in the mature cottonwood tree located within the BSA.

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		associated with open water (also lawns, orchards, and riparian vegetation) in grassy and scrub landscapes. Feeds on varied insects. No specific threats known apart from cosmetic trimming of dead fronds on ornamentally planted palms.		
San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*)	-/CSC/-/ MSHCP	This jackrabbit occurs in Los Angeles, Riverside, San Bernardino, and San Diego counties in herbaceous and desert shrub areas, sage scrub, grasslands, open chaparral, and woodland/forest areas. Relatively tolerant of disturbance.	HP	Suitable desert scrub habitat to support this species is present within the BSA. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Bryant's (San Diego Desert) Woodrat (*Neotoma byranti [=N. lepida intermedia]*)	-/CSC/-/ MSHCP	This woodrat occurs in dry and/or sunny shrublands, especially (but not requiring) areas with cacti and abundant rocks and crevices. Does not require a source of drinking water. Sage scrub communities are frequently occupied.	HP/P	Suitable habitat is present in the Riversidian upland sage scrub and unvegetated stream channel portions of the BSA. This species was determined to be present in the BSA during the small mammal trapping surveys performed in November 2023. MSHCP: This species is fully covered by the MSHCP and, as such, any potential impacts would be fully mitigated by the MSHCP. No MSHCP-specific surveys are required and no further action is necessary.
Southern Grasshopper Mouse (*Onychomys torridus ramona*)	-/CSC/-/-	Wide variety of dry to moderately dry scrub, grassland and woodland habitats across southern California, exclusive of the more mesic coastal areas from Ventura County north.	HP	Suitable scrub habitat is present within the BSA. Although this species was not detected during the small mammal trapping surveys performed in November 2023, trapping for grasshopper mouse uses different techniques than the ones employed for this project that focused on San Bernardino kangaroo rat and Los Angeles pocket mouse, so presence of this species within the BSA cannot be ruled out.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*)	-/CSC/-/ MSHCP(c)	This pocket mouse inhabits areas of open ground, prefers fine sandy soils (for burrowing), but is also found commonly on gravel washes and on stony soils, within brush and woodland habitats. It is rarely found on sites with a high cover of rocks.	HP/P	Suitable habitat is present in the Riversidian upland sage scrub and unvegetated stream channel portions of the BSA. This species was determined to be present in the BSA during trapping surveys performed in November 2023. MSHCP: The project occurs within the MSHCP Survey Area for this species. As such, MSHCP-specific surveys are required.
American Badger (*Taxidea taxus*)	-/CSC/-/-	Associated with large grassland and sparse sage scrub habitats. Occupies large dens/burrows and forages on small mammals (e.g. ground squirrels, rabbits), snakes, birds, and insects.	HP	Low to moderate suitable scrub habitat is present in the BSA. However, no dens or burrows large enough to support this species were detected during the burrowing owl burrow mapping surveys performed for the project in August 2022.
Palm Springs Round-tailed Ground Squirrel (*Xerospermophilus tereticaudus chlorus*)	-/CSC/-/-	Associated with sandy, arid regions typically in scrub and wash habitats including mesquite- and creosote-dominated sand dunes, creosote bush scrub, creosote-palo verde and saltbush/alkali scrub. Occasionally uses burrows of other rodents, but burrows are usually dug at bases of shrubs, often creosote shrubs.	HA	While the BSA is characterized as sandy and arid, there are no suitable mesquite or creosote shrubs present. There are also no historical records of this species in the project vicinity. This species is not expected to occur. No further constraint is present.
SENSITIVE NATURAL COMMUNITIES				
Canyon Live Oak Ravine Forest	-/SR S3.3/-/-	Broad-leaved forest dominated by coast live oak (*Quercus chrysolepis*). Typically forms a dense canopy with little to no understory. Found in ravines, canyon bottoms, and on steep slopes.	A	This community does not occur within the BSA.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Desert Fan Palm Oasis Woodland	-/SR S3.2/-/-	A desert habitat that is dominated by California fan palm (*Washingtonia filifera*), which tower over a subcanopy of smaller trees and large shrubs such as Fremont's cottonwood (*Populus fremontii*), western sycamore, velvet ash (*Fraxinus velutina*), sandbar willow (*Salix exigua*), and mesquite. Forbs and grasses may be present in the understory, although larger stands generally have a sparse understory. Restricted to areas with permanent water or a water table that approaches the ground surface. Typically occurs at sites with moist alkaline soils near seeps, springs, and streams. Found around the Salton Sea basin, especially along the San Andreas Fault, south into Sonora and Baja California, Mexico and western Arizona.	A	This community does not occur within the BSA.
Southern Coast Live Oak Riparian Forest	-/SR S4/-/-	An open to locally dense evergreen sclerophyllous riparian woodland dominated by coast live oak (*Quercus agrifolia*). Typically very little in shrub understory, but rich in herbs.	A	This community does not occur within the BSA.
Southern Cottonwood Willow Riparian Forest	-/SR 3.2/-/-	A tall, open, broadleafed winter-deciduous forest. Community is dominated by Fremont's cottonwood and willow species. The understory typically consists of shrubby willows, such as arroyo willow (*S. lasiolepis*).	A	This community does not occur within the BSA.
Southern Mixed Riparian Forest	-/SR S2.1/-	Contains some large but mainly medium sized and saplings of willow, and cottonwood are more common than large trees. A denser understory of shrubs, mugwort (*Artemisia douglasiana*), and vines are more common in this community	A	This community does not occur within the BSA.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE
Southern Riparian Scrub	-/SR S3.2/-	A dense community, dominated by several willow species and Fremont's cottonwood or western sycamore (*Platanus racemosa*), which are mostly small and contain a large amount of shrubs such as mulefat (*Baccharis salicifolia*).	A	This community does not occur within the BSA.
Southern Sycamore Alder Riparian Woodland	-/SR S4/-/-	A tall, open, broadleafed, winter-deciduous streamside woodland dominated by western sycamore and alder (*Alnus rhombifolia*). These stands seldom form closed canopy forests, and even may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species. Lianas include California blackberry (*Rubus ursinus*) and poison oak (*Toxicodendron diversilobum*).	A	This community does not occur within the BSA.

[a] Status Codes

Federal
E = Federally listed; Endangered
PE = Proposed Endangered
T = Federally listed; Threatened
PT = Proposed Threatened
FC = Federal Candidate for Listing
D = Delisted

State
T = State listed; Endangered
E = State listed; Threatened
SC = State Candidate for Listing
R = Rare (Native Plant Protection Act)
CSC = California Species of Special Concern
FP = California Fully Protected Species
WL = Watch List
SR = State Rarity (California Sensitive Natural Communities List)

Multiple Species Habitat Conservation Plan (MSHCP)
MSHCP = No additional action necessary
MSHCP(a) = Surveys may be required as part of wetlands mapping
MSHCP(b) = Surveys may be required within the Narrow Endemic Plant Species survey area
MSHCP(c) = Surveys may be required within locations shown on survey maps
MSHCP(d) = Surveys may be required within Criteria Area
MSHCP(e) = Conservation requirements identified in species-specific conservation objectives need to be met before classified as a Covered Species
MSHCP(f) = These Covered Species will be considered to be Covered Species Adequately Conserved when a Memorandum of Understanding is executed with the Forest Service that addresses management for these species on Forest Service Land.

California Rare Plant Ranks (CRPR)
1A = Plants presumed extinct in California
1B = Plants rare, threatened, or endangered in California and elsewhere
2 = Plants rare, threatened, or endangered in California, but more common elsewhere
3 = Plants about which we need more information
4 = Limited distribution (Watch List)
0.1 = Seriously endangered in California
0.2 = Fairly endangered in California
0.3 = Not very endangered in California
CNDDB = Vegetation communities classified as depleted

[b] Habitat Presence/Absence Codes
P = The species is present.
HP =Habitat is or may be present. The species may be present.
HA = No habitat present and no further work needed.
A = This species is absent.

COMMON/ SCIENTIFIC NAME	STATUS FEDERAL/ STATE/CRPR/ MSHCP[a]	SPECIES REQUIREMENTS	SPECIFIC HABITAT PRESENT/ ABSENT[b]	RATIONALE

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Appendix E AB 52 Tribal Correspondence Record

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Table 1. Native American Consultation Log.

Native American Group/ Individual	First Contact	Date of Tribal Response	Second Contact Phone/Email/Letter	Date of Tribal Response	Additional Contacts Phone/Email/ Letter	Summary of Communications
Morongo Band of Mission Indians Ann Brierty, Tribal Historic Preservation Officer	February 7, 2024 (email; certified letter)	No response to date	March 15, 2024 (email, phone call)	March 18, 2024 (email)	No additional contacts to date	• **February 7, 2024:** Initial contact letter sent via certified mail and email. • **March 15, 2024:** Follow-up email and phone call; voicemail left. • **March 18, 2024:** Email on behalf of Ann Brierty containing letter requesting government-to-government consultation; tribal monitor for all ground-disturbing activities; tribal representative at the pre-Project meeting with contractors; and that all construction workers be required to attend a Workers Environmental Awareness Program. • **June 20, 2024:** Gary Jones of Caltrans emailed Joan Schneider, Ann Brierty, Laura Chatterton, Elisha Duncan, and the THPO department a copy of the Archaeological Survey Report for review. • **June 30, 2024:** Ann Brierty provided a response to Caltrans relating to their review of the Archaeological Survey Report. MBMI requested two additions to the section related to the inadvertent discovery of human remains. Additionally, MBMI deferred to the Soboba Band of Luiseno Indians regarding providing Tribal monitoring for the project. MBMI also stated that they wished to continue government-to-government consultation with Caltrans and to be informed of the project's progress. • **July 11, 2024:** Ann Brierty of MBMI responded to Soboba that they had responded to Gary Jones of Caltrans that MBMI would be deferring to Soboba regarding Tribal monitoring.
Pala Band of Mission Indians Shasta Gaughen, Tribal Historic Preservation Officer	February 7, 2024 (email; certified letter)	No response to date	March 15, 2024 (email, phone call)	March 22, 2024 (email)	April 2, 2024 (email)	• **February 7, 2024:** Initial contact letter sent via certified mail and email. • **March 15, 2024:** Follow-up email and phone call; voicemail left. • **March 22, 2024:** Email from Alexis Wallick, Assistant THPO with attached letter from Dr. Shasta Gaughen, THPO, stating that the project is outside of the Tribe's recognized boundaries of the Pala Indian Reservation and is also beyond the boundaries of the territory the Tribe considers its Traditional Use Area. The letter stated that the Tribe declined consultation under AB52 but did not waive their right to request consultation under other applicable laws in the future. • **April 2, 2024:** Email sent to Dr. Gaughen asking if the Tribe also declined to consult under Section 106; at the time of this report, no response has been received.
Pechanga Band of Indians Ebru Ozdil, Cultural Analyst	February 7, 2024 (email; certified letter)	No response to date	March 15, 2024 (email, phone call)	No response	April 3, 2024 (email and phone call)	• **February 7, 2024:** Initial contact letter sent via certified mail and email. • **March 15, 2024:** Follow-up email and phone call to both Ebru Ozdil and Paul Macarro; voicemail left. • **April 3, 2024:** Follow-up email and phone call to both Ebru Ozdil and Paul Macarro; • **August 8, 2024:** In-person meeting with Caltrans and Pechanga to discuss the project. Pechanga sated that additional information about TCPs would be provided in the future.
Rincon Band of Luiseño Indians Cheryl Madrigal, Tribal Historic Preservation Officer	February 7, 2024 (email; certified letter)	February 28, 2024 (email)	No follow up necessary	No response necessary	No additional contacts to date	• **February 7, 2024:** Initial contact letter sent via certified mail and email. • **February 28, 2024:** Email from Cheryl Madrigal containing letter stating that the tribe does not request consultation and recommending that Caltrans contact the Soboba Band of Luiseño Indians.

Native American Group/ Individual	First Contact	Date of Tribal Response	Second Contact Phone/Email/Letter	Date of Tribal Response	Additional Contacts Phone/Email/ Letter	Summary of Communications
Soboba Band of Luiseño Indians Joseph Ontiveros, Cultural, Cahuilla Luiseño	February 7, 2024 (email; certified letter)	February 29, 2024 (email)	No follow up necessary	No response necessary	No additional contacts to date	• **February 7, 2024:** Initial contact letter sent via certified mail and email. • **February 29, 2024:** Email containing letter from Mr. Joseph Ontiveros stating that the tribe requests government-to-government consultation; transfer of information to the tribe regarding the progress of the Project; Native American monitor(s) from the Soboba Band of Luiseño Indians Cultural Resource Department during any ground-disturbing activities, including surveys and archaeological testing; and that proper procedures be taken and requests of the tribe be honored. • **June 20, 2024:** Gary Jones of Caltrans emailed Jessica Valdez and Joseph Ontiveros a copy of the Archaeological Survey Report for review. • **Jul 9, 2024:** Joseph Ontiveros of Soboba emailed Ann Brierty of MBMI to request that MBMI "defer the consultation, treatment and disposition for inadvertent discoveries, sensitivity training, and tribal monitoring to the Soboba Band." • **July 11, 2024:** Ann Brierty of MBMI responded to Soboba that they had responded to Gary Jones of Caltrans that MBMI would be deferring to Soboba regarding Tribal monitoring. • **July 11, 2024:** Joe Ontiveros replied to Ann Brierty inquiring about whether MBMI would also be deferring consultation for treatment and disposition of inadvertent discoveries to Soboba.
Yuhaaviatam of San Manuel Nation Alexandra McCleary, Tribal Historic Preservation Officer	February 7, 2024 (email; certified letter)	February 7, 2024	No follow up necessary	No response necessary	No additional contacts to date	• **February 7, 2024:** Initial contact letter sent via certified mail and email. • **February 7, 2024:** Raylene Borrego, Cultural Resources Technician responded to Gary Jones via email that the Project is outside of Serrano ancestral territory and that YSMN will not be requesting to receive consulting party status.

Appendix F List of Technical Studies

- Historic Property Survey Report (2024) (Confidential- Not for Public Distribution)
- Archaeological Survey Report (2024) (Confidential- Not for Public Distribution)
- Phase I Initial Site Assessment (2024)
- Natural Environment Study (Minimal Impacts) (2024)
- Jurisdictional Delineation Report (2024)
- Determination of Biologically Equivalent of Superior Preservation Report (2025)
- Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis (2025)
- Water Quality Technical Memorandum (2024)
- Construction Impact Analysis (2023)
- Visual Impact Assessment Memorandum (2024)

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