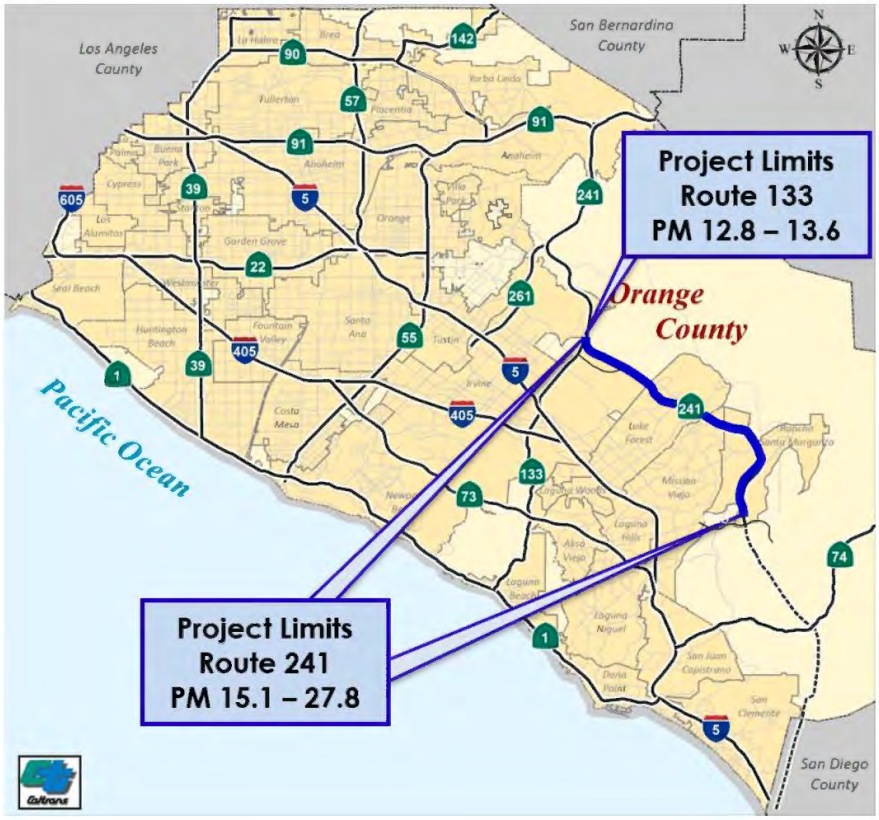
SR-241/SR-133 Multi Asset Project

ORANGE COUNTY, CALIFORNIA
DISTRICT 12–ORA–241 (PM 15.1/27.8) & 12–ORA–133 (PM 12.8/13.6)
12-0T270/1222000027

Initial Study with Proposed Mitigated Negative Declaration



Prepared by the
State of California, Department of Transportation

May 2026

General Information about This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Orange County in the cities of Irvine, Lake Forest, Mission Viejo and Rancho Santa Margarita. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this document.
- Additional copies of this document are available for review at the following locations:
    - Caltrans District 12 Office at 1750 East 4th Street, Suite 100, Santa Ana, CA 92705, on weekdays from 8:00 a.m. to 5:00 p.m.
    - OC Library – Foothill Ranch Branch (27002 Cabriole, Foothill Ranch, CA 92610) (Hours: Mon - Thu: 10:00 am - 7:00 pm and Sat: 9:00 am - 5:00 pm)
    - OC Library – Rancho Santa Margarita Branch (30902 La Promesa, Rancho Santa Margarita, CA 92688) (Hours: Mon - Thu: 10:00 am - 7:00 pm and Fri - Sat: 9:00 am - 5:00 pm).
- This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-12/district-12-programs/district-12-environmental/sr-241-133-multi-asset-project.
- We'd like to hear what you think. If you have any comments about the proposed project, please send your written comments via postal mail or email to Caltrans District 12 by the deadline.
- Send comments via postal mail to:
  Caltrans District 12 Office
  Attn: Sunny Saroa
  1750 East 4th Street, Suite 100,
  Santa Ana, California 92705
- Send comments via email to: sr.241.133.multi.asset@dot.ca.gov
- Be sure to send comments or request for a public hearing by the deadline: June 18, 2026.

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans could design and construct all or part of the project.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans District 12, Division of Environmental Analysis, 1750 East 4th Street, Suite 100, Santa Ana, California 92705 Attn: Sunny Saroa, (949) 556-2513 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

State Clearinghouse# Enter number
12-ORA-133-12.8/13.6 & 12-ORA-241-15.1/27.8
12-0T270/1222000027

This project proposes to rehabilitate existing pavement, restore drainage systems and increase safety of the roadway in various cities on State Route 241 (SR-241) and State Route 133 (SR-133) in Orange County

Initial Study with Proposed Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agency: California Transportation Commission

Chris Flynn
_____
Chris Flynn
Deputy District Director
California Department of Transportation
CEQA Lead Agency

May 14, 2026
_____
Date

The following persons may be contacted for more information about this document:

Sunny Saroa, Associate Environmental Planner
California Department of Transportation, District 12
Division of Environmental Analysis
1750 East 4th Street, Suite 100
Santa Ana, California 92705
(949) 556-2513

State Clearinghouse#: Enter number if one has already been assigned

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate pavement, restore drainage systems, and enhance roadway safety and mobility along State Route 133 (SR-133) and State Route 241 (SR-241) in Orange County, California. The project improvements will extend from Post Mile (PM) 15.1 to PM 27.8 on SR-241 and PM 12.8 to PM 13.6 on SR-133 in the cities of Irvine, Lake Forest, Mission Viejo, Rancho Santa Margarita and Unincorporated County of Orange. Two alternatives are being considered: the Build Alternative and the No-Build Alternative.

DRAFT Determination

This proposed Mitigated Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Mitigated Negative Declaration for this project. This does not mean that Caltrans' decision regarding the project is final. This Mitigated Negative Declaration is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, it is determined that the proposed action with the incorporation of the identified mitigation measures will not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on aesthetics, agriculture and forestry resources, cultural resources, land use and planning, mineral resources, population and housing, recreation, tribal cultural resources, utilities and service systems.

In addition, the proposed project would have less than significant effects to air quality, biological resources, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation, and wildfire.

With the following mitigation measures incorporated, the proposed project would have less than significant effects to geology and soils:

PAL-1 A Paleontological Mitigation Plan (PMP) will be required at 65% PS&E that outlines the mitigation measures for paleontological services adhered during construction.

DRAFT

PAL-2 PMP (Pre-Construction) Mandatory Paleontological Awareness Training (30 mins) conducted by District 12 Archaeologist or/Paleontologist, will be conducted prior to any construction work for all parties that will be onsite.

Chris Flynn
Deputy District Director
District #12
California Department of Transportation

May 14, 2026
Date

DRAFT

Table of Contents

General Information about This Document i
Proposed Mitigated Negative Declaration iv
Table of Contents vi
List of Tables viii
List of Figures viii
Chapter 1 Proposed Project 1-1
1.1 INTRODUCTION 1-1
1.2 PURPOSE AND NEED 1-1
1.2.1 Purpose 1-1
1.2.2 Need 1-1
1.3 PROJECT DESCRIPTION 1-4
1.4 PROJECT ALTERNATIVES 1-4
1.4.1 No-Build (No-Action) Alternative 1-4
1.4.2 Build Alternative 1-4
1.4.3 Other Project Elements (Standardized Project Measures) 1-5
1.5 DECISION MAKING PROCESS 1-9
1.6 PERMITS AND APPROVALS NEEDED 1-9
Chapter 2 CEQA Evaluation 2-1
2.1 DETERMINING SIGNIFICANCE UNDER CEQA 2-1
2.2 CLIMATE CHANGE 2-1
2.2.1 Environmental Setting 2-2
2.2.2 Project Analysis 2-7
2.2.3 Greenhouse Gas Reduction Strategies 2-9
2.2.4 Adaptation 2-13
2.2.5 References 2-16
2.4 CEQA ENVIRONMENTAL CHECKLIST 2-22
2.4.1 Aesthetics 2-22
2.4.2 Agriculture and Forestry Resources 2-24
2.4.3 Air Quality 2-26
2.4.4 Biological Resources 2-28
2.4.5 Cultural Resources 2-41
2.4.6 Energy 2-43

2.4.7 Geology and Soils 2-44
2.4.8 GHG Emissions 2-47
2.4.9 Hazards and Hazardous Materials 2-49
2.4.10 Hydrology and Water Quality 2-53
2.4.11 Land Use and Planning 2-58
2.4.12 Mineral Resources 2-59
2.4.13 Noise 2-59
2.4.14 Population and Housing 2-61
2.4.15 Public Services 2-62
2.4.16 Recreation 2-64
2.4.17 Transportation 2-65
2.4.18 Tribal Cultural Resources 2-67
2.4.19 Utilities and Service Systems 2-70
2.4.20 Wildfire 2-72
2.4.21 Mandatory Findings of Significance 2-74
Chapter 3 Comments and Coordination 3-1
3.1 Project Development Team (PDT) Meetings 3-1
3.2 Tribal Cultural Resources 3-1
3.3 Biological Resources 3-1
3.4 Public Participation 3-24
Chapter 4 List of Preparers 4-1
Chapter 5 Distribution List 5-1
Appendix A Title VI/Non-Discrimination Policy Statement A-1
Appendix B RTIP-FTIP B-1
Appendix C Avoidance, Minimization, and/or Mitigation Summary C-1
Appendix D List of Technical Studies D-1

List of Tables

Table 1-1: Permits and Approvals 1-10
Table 2-1: Regional and Local Greenhouse Gas Reduction Plans 2-5
Table 2-2: Construction-related CO2e Emissions by Alternative 2-9
Table 2-3: Federal Endangered Species Act Consultation Summary 2-31

List of Figures

Figure 1-1: Project Location Map 1-3
Figure 2-1: U.S. 2022 GHG Emissions 2-3
Figure 2-2: Total 2022 U.S. GHG Emissions by Economic Sector 2-3
Figure 2-3: 2023 CA GHG Emissions By Scoping Plan Sector 2-4

Chapter 1 Proposed Project

1.1 INTRODUCTION

The California Department of Transportation (Caltrans) District 12 proposes a multi-asset project in various cities in Orange County along State Route 241 (SR-241) from 0.7 mile north of Oso Parkway Overcrossing (PM 15.1) to 0.4 mile north of the State Route 133 (SR-133) Interchange (PM 27.8) and on SR-133 from 0.2 mile north of Portola Parkway (PM 12.8) to Bee Canyon Access Road (PM 13.6) (see Figure 1-1, Project Location Map).

This multi-asset project proposes the following improvements: pavement preservation, drainage system restoration, lighting rehabilitation, roadside rehabilitation/roadway protective betterments, safety and mobility improvements, and complete street upgrades.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA). Two alternatives are under consideration for this project: The Build Alternative and the No Build Alternative.

1.2 PURPOSE AND NEED

1.2.1 Purpose

The purpose of this project is to rehabilitate pavement, restore drainage systems, and increase safety of the roadway.

1.2.2 Need

A. Problem, Deficiencies, Justification

   a. Existing pavement exhibits surface distress and low ride quality

   b. The drainage system has lost its serviceability

   c. Lighting conduits are outdated, and street light bulbs need to be replaced with LEDs

   d. Maintenance crews are exposed to traffic while maintaining roadside facilities

B. Regional and System Planning

   a. Rumble strips have been applied statewide on a widespread basis due to safety benefits

C. Traffic

a. ADA curb-ramps don’t meet current standard requirements

b. The California Manual on Uniform Traffic Control Devices (CA MUTCD) requires curve warning signs at horizontal alignments in compliance with the Federal Highway Administration (FHWA).

Figure 1-1: Project Location Map



State Route 241 Multi Asset Project
EA 0T270; EFIS 1222000027

Rancho Santa Margarita to Irvine
Orange County, California
SR 241, Post Miles (PM) 15.1/27.8
SR 133, PM 12.8/13.6

Legend

Project Area
County Line

0 1 2 4 Miles
0 2 4 8 Kilometers

1:300,000

Project Location Map

Caltrans

CALTRANS DISTRICT 12 ORANGE COUNTY

1.3 PROJECT DESCRIPTION

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. This multi-asset project proposes the following improvements: pavement preservation, drainage system restoration, lighting rehabilitation, roadside rehabilitation/roadway protective betterments, safety and mobility improvements, and complete street upgrades. The alternatives are the “Build Alternative” and the “No-Build Alternative.”

1.4 PROJECT ALTERNATIVES

The Build Alternative includes improvements along SR-241 and SR-133, and satisfies the need and purpose of the project. The proposed improvements are listed below.

1.4.1 No-Build (No-Action) Alternative

The No Build Alternative will maintain the existing conditions. This alternative does not satisfy the need and purpose of the project. .

1.4.2 Build Alternative

1.4.2.1 Pavement Preservation

The core objective of the Build Alternative is pavement preservation. The project proposes to cold plane existing pavement and replace it with open graded friction course (OGFC) and rubberized hot mix asphalt, gap graded (RHMA-G) on the mainline lanes, shoulders, and ramps within the project limits. The OGFC will only be placed at locations where OGFC is already present in the existing pavement. The pavement thickness will remain unchanged. Additional work includes installation of new loop detectors and upgrade of several locations of existing traffic safety devices and asphalt concrete (AC) dikes to current standards.

This multi-asset project also includes several satellite objectives, including drainage system restoration, lighting rehabilitation, roadside rehabilitation/roadway protective betterments, safety and mobility improvements, and complete street upgrades.

1.4.2.2 Drainage System Restoration

The existing culverts and drainage systems are in poor condition and have lost serviceability due to age, wear, and degradation. This project proposes to cure-in-place, slip line, or replace culverts at various locations. In addition, this projects also proposes to repair the gutter at the retaining wall at the end of the tunnel from NB SR-241 to SB SR-133.

1.4.2.3 Lighting Rehabilitation

This project proposes to upgrade 39 existing streetlights to light-emitting diode (LED) lights and replace 7,650 linear feet of existing lighting conduits.

1.4.2.4 Roadside Rehabilitation/Roadway Protective Betterments

This project proposes to pave beyond gores at several locations along the project limits. Additionally, this project will upgrade 5 acres of highway plants and irrigation systems.

1.4.2.5 Safety and Mobility

This project proposes to install 75 curve warning signs at 22 locations, install 280,000 linear feet of rumble strips along the right and left shoulders on both northbound (NB) and southbound (SB) directions, and upgrade 3 traffic census station locations along the NB and SB roadway.

1.4.2.6 Complete Streets

This project proposes to upgrade 31 curb-ramps to current standards for the Americans with Disabilities Act (ADA) and restripe pedestrian crosswalks following the pavement upgrades.

1.4.3 Other Project Elements (Standardized Project Measures)

The Build Alternative contains several standardized project measures that are employed on most, if not all, Caltrans projects. The use of these measures with the Build Alternative is described in more detail in Chapter 2 of this Initial Study as Project Features (PF) are numbered. For example, a Project Feature applicable to water quality would be titled and listed as PF-WQ-1.

Air Quality

PF-AQ-1: Caltrans Standard Specifications in Section 14-9. The construction contractor must comply with the Department Standard Specification in Section 14-9, Air Quality (2025), which specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances.

Biological Resources

PF--BIO-1: Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to ESAs. No

structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.

PF-BIO-2: Construction equipment/vehicle staging, storage, maintenance, and dispensing of fuel/oil shall occur within the paved road unless approved by the Caltrans Biologist.

PF-BIO-3: Night work shall be avoided. If night work is necessary, all lighting used at night for project construction will be of the lowest illumination necessary for human safety and will be selectively placed and directed at the immediate work area and away from adjacent habitats, specifically coastal sage scrub. Light glare shields will be used to reduce the extent of illumination into habitats.

PF-BIO-4: Work within 500 feet of suitable CAGN habitat shall avoid the CAGN nesting season (February 15 – August 31). If work must occur during the CAGN nesting season, a Caltrans biologist will conduct a preconstruction survey for gnatcatchers within 3 days of the start of work within 500 feet of suitable habitat. If CAGN are found, the Caltrans biologist will coordinate with USFWS. No work will occur within 500 feet of the active nest without written approval from USFWS.

PF-BIO-5: Work shall occur outside of the nesting bird season (February 1 – September 30). If any vegetation removal must occur during the nesting bird season, then a pre-construction survey by a Caltrans Biologist must be conducted within 72 hours prior to the start of work. The RE must request the nesting bird survey with at least 2 weeks of a notice to the Caltrans Biologist. If any active nests are found, the Caltrans Biologist will determine a no work buffer (up to 500 feet) and if any resource agency coordination needs to occur.

PF-BIO-6: Any vegetation removal that may include invasive plant species will be properly disposed of at a landfill, or similar. No plant materials will be disposed of will be disposed of within the project site.

PF-BIO-7: Equipment will not be cleaned within 250 feet of a waterway or upslope of a waterway where plant materials could be washed downhill into a waterway.

PF-BIO-8: Revegetation and landscaping efforts will not include any plant species known to be invasive by either the California Invasive Plant Council or the US Department of Agriculture.

Cultural Resources

PF-CUL-1 Discovery of Cultural Materials. If buried cultural resources are encountered during Project Activities, it is the Department policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

PF-CUL-2 Discovery of Human Remains. In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 12 Division of Environmental Analysis; Environmental Branch Chief (EBC) and District Native American Coordinator, DNAC. Further provisions of PRC 5097.98 are to be followed as applicable.

PF-CUL-3 Cultural Sensitivity Training. Cultural Sensitivity Training must be provided to the Contractor prior to the start of construction at the pre-construction meeting and/or the construction kick off meeting. This training can be done separately or in conjunction with other environmental training (i.e. WEAT/WEAP/Biological Awareness Training).

Hazardous Materials

PF-HAZ-1 The project involves excavation during repair or replacement of guardrail and improvement of drainage facilities. Aerially Deposited Lead (ADL) investigation is required at the soil disturbance area. ADL investigation will be completed during PS&E phase. The investigation will be conducted during PS&E phase. Design Branch is required to submit an ADL investigation request with a plan highlighting the soil disturbance areas and details of excavation including depth and length of the excavation. Based on the findings of the investigation, Standard Special Provisions (SSP) for the removal of ADL contaminated soil will be provided. During the construction, the appropriate SSP will be implemented.

PF-HAZ-2 The proposed project includes removal of existing wood posts for Metal Guardrail System (MGS) supports and signposts, which contain chemical preservatives. The wood posts are considered treated wood waste (TWW). For the management and disposal of TWW, the contract must follow the DTSC regulation. Specification for the management of TWW will be provided in the PS&E phase. During construction, the appropriate SSP will be implemented.

PF-HAZ-3 During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination

or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the California Department of Transportation (Caltrans) Construction Manual and 14-11.02 of the Department Standard Specification (2025).

PF-HAZ-4 Traffic striping/markings, and other colors of paint contains lead at the concentration less than hazardous level of concentration. SSP for non-hazardous paint will be provided in the PS&E phase of the project. Contractor will follow the appropriate SSP for the removal of the traffic striping/markings and other paints.

Water Quality and Storm Water Runoff

PF-WQ-1 The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2022-0033-DWQ, NPDES No. CAS000003 and the and any subsequent permits in effect at the time of construction

PF-WQ-2 The project will comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2022-0057-DWQ, NPDES No. CAS000002 and any subsequent permits in effect at the time of construction.

PF-WQ-3 The project will comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have potential impact on water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs

PF-WQ-4 Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow

conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices

Noise

PF-N-1 **Noise Control:** Contractor must comply with the Department's Standard Specification 14-8.02, "Noise Control" (2025) during construction. The specification states following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA L_{max} at 50 feet from the job site from 9 p.m. to 6 a.m.

Paleontological Resources

PF-PAL-1 **Discover of Unanticipated Paleontological Resources.** If unanticipated paleontological resources are discovered during Project Activities, it is Caltrans policy that work stop within 60 feet of the area until a Caltrans Project Paleontologist/Archaeologist can evaluate the nature and significance of the find.

Traffic

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by the Department. Adequate local emergency access shall be provided at all times to adjacent uses. Proper detours and warning signs should be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

1.5 DECISION MAKING PROCESS

After the public circulation period, all comments will be considered, and Caltrans will select a preferred alternative and make the final determination of the project's effect on the environment. Under the California Environmental Quality Act (CEQA), if Caltrans is able to mitigate the significant impacts, a Mitigated Negative Declaration (MND) will be prepared.

1.6 PERMITS AND APPROVALS NEEDED

The following permits, licenses, agreements, and certifications are required for project construction:

Table 1-1: Permits and Approvals

Agency	Permit/License/ Agreement/Certification	Status
California Transportation Commission (CTC)	Funding Approval	Approval will be obtained after approval of the Final Environmental Document

Chapter 2 CEQA Evaluation

2.1 DETERMINING SIGNIFICANCE UNDER CEQA

The proposed project is a project by Caltrans and is subject to state environmental review requirements. Project documentation, therefore, has been prepared in compliance with both CEQA Caltrans is the lead agency under CEQA.

CEQA requires Caltrans to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report must be prepared. Each and every significant effect on the environment must be disclosed in the Environmental Impact Report and mitigated if feasible. In addition, the CEQA Guidelines list a number of “mandatory findings of significance,” which also require the preparation of an Environmental Impact Report. See the SER, Volume 1, Chapter 36, “Environmental Impact Reports” for more information. This chapter discusses the effects of this project and CEQA significance.

2.2 CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to Greenhouse Gas (GHG) emissions reduction and climate change research and policy. Research published by the Intergovernmental Panel on Climate Change and other scientists over recent decades has shown an accelerated rate of climatological changes over the past 150 years, attributed to GHG emissions generated from the production and use of fossil fuels.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, “mitigation” involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. “Adaptation” is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

2.2.1 Environmental Setting

The project area includes a mix of residential, commercial, industrial, agriculture, open space, and recreational land uses. The route in the project area is heavily used during peak hours. The proposed project area is in a region with a Mediterranean climate with hot dry summers and mild, wet winters. Vegetation types near the project area include a coastal sage scrub, riparian, annual grassland, farmland, ornamental, and ruderal vegetation.

2.2.1.1 GHG Inventories

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals.

National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2022 were 5,489.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 15% of total U.S. emissions in 2022 [U.S. EPA 2024a].) While total GHG emissions in 2022 were 17% below 2005 levels, they increased by 1% over 2021 levels. Of these, 80% were CO2, 11% were CH4, and 6% were N2O; the balance consisted of fluorinated gases (Figure 2-1). From 1990 to 2022, CO2 emissions decreased by only 2% (U.S. EPA 2024a).

The transportation sector's share of total GHG emissions remained at 28% in 2022 and continues to be the largest contributing sector (Figure 2-2). Transportation activities accounted for 37% of U.S. CO2 emissions from fossil fuel combustion in 2022. This is a decrease of 0.5% from 2021 (U.S. EPA 2024a, 2024b)).

Figure 2-1: U.S. 2022 GHG Emissions

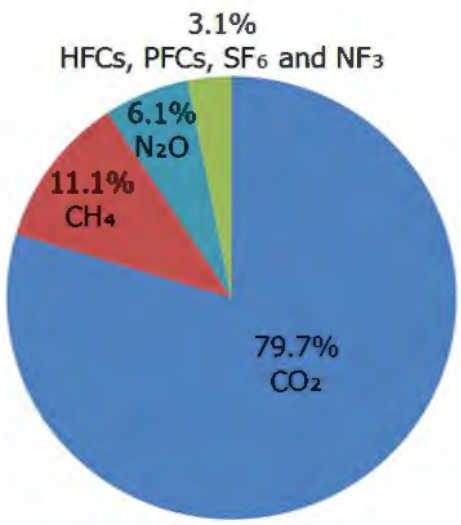
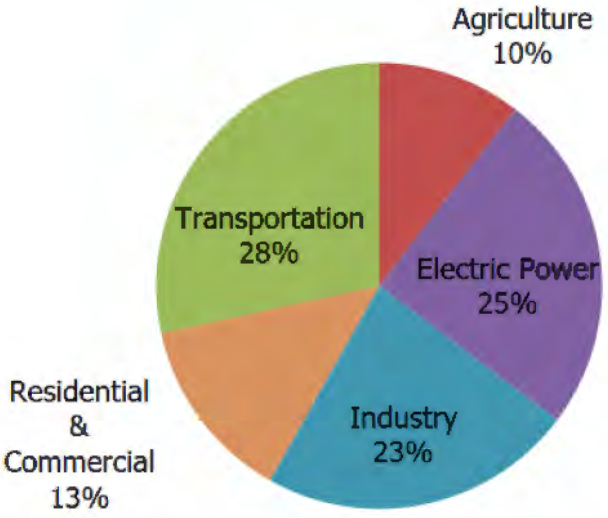


Figure 2-2: Total 2022 U.S. GHG Emissions by Economic Sector



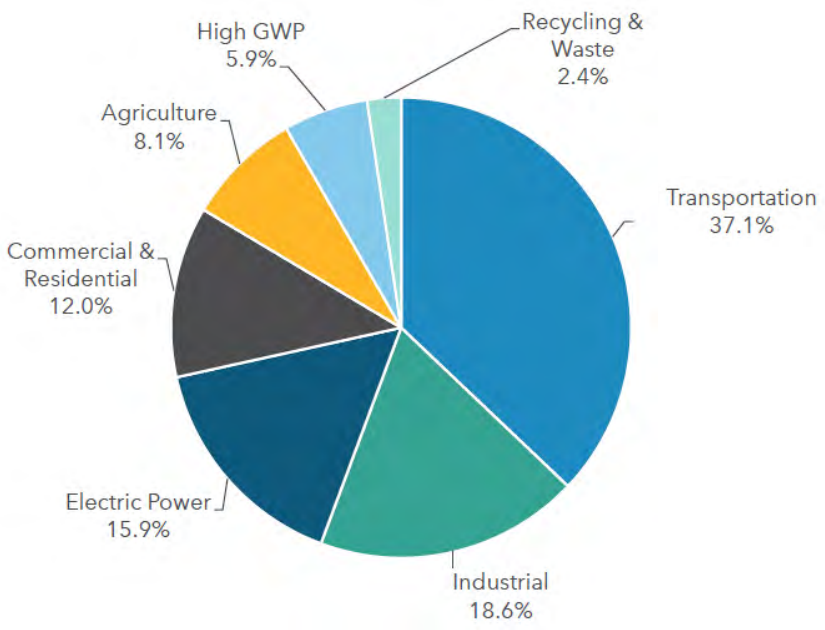
State GHG Inventory

The California Air Resources Board collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The transportation sector remains the largest source of GHG emissions in the state. Direct emissions from vehicle tailpipes, intrastate aviation, and other transportation sources account for 37.1% of statewide emissions in 2023 (Figure 2-3). Emissions from this sector decreased by 6.5 $MMTCO_2e$ (4.6%) compared to 2022, primarily due to a greater share of diesel used for on-road transportation being produced from non-fossil resources. When upstream emissions from oil extraction, petroleum refining, and oil

pipelines in California are included, transportation is responsible for 46.4% of statewide emissions in 2023.

Emissions from the transportation sector have generally decreased since their peak in 2002 but have experienced periods of both emissions growth and decline. Several factors can influence transportation sector emissions. These include vehicle miles traveled (VMT), vehicle GHG emissions rates, the number of zero-emission vehicles on the road, and the amount of fuel derived from non-fossil resources. Year-to-year changes in economic conditions can also impact the amount of transportation fuel used across the state. The decrease in 2023, which is primarily due to reductions from on-road sources, brings emissions to their lowest level of the inventory time series. One factor that contributed to emission reductions from on-road sources in 2023 was a decrease in the amount of fuel used. This decrease occurred despite increased VMT and was observed both for heavy- and light-duty vehicles. The amount of gasoline blend used on-road decreased by 0.5% while the amount of diesel blend used decreased by 2.8%. Meanwhile, the percentage of on-road diesel blend produced from non-fossil resources increased from 41% to 56%. The increased percentage of diesel produced from non-fossil resources also led to emission reductions from ships (most notably from commercial harbor craft) and rail.

Figure 2-3: 2023 CA GHG Emissions By Scoping Plan Sector



2.2.1.2 Regional Plans

As required by The Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375), California Air Resources Board sets regional GHG reduction targets for California's 18 metropolitan planning organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy

(RTP/SCS). Targets are set as a percentage reduction in passenger vehicle GHG emissions per person, based on 2005 levels.

The proposed project is within Southern California Association of Governments' (SCAG's) jurisdiction. SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) titled Connect SoCal 2024 is a long-range plan that guides transportation development for the region's growth to 2050. The plan's Sustainability element addresses GHGs in the project area.

The Orange County Transportation Authority and Orange County Council of Governments published the Orange County Sustainable Communities Strategy in 2011, developed to be integrated with the SCAG SCS. The Orange County SCS offers sustainability strategies to reduce GHG emissions from land use and transportation. In addition, the City of Irvine is in the process of developing a Climate Action and Adaptation Plan and the County of Orange has developed a Draft Preliminary Climate Action Plan. The cities of Irvine, Lake Forest, Mission Viejo, and Rancho Santa Margarita list GHG Reduction Policies and Strategies in their General Plans (Table 2-1).

Table 2-1: Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
Southern California Association of Governments (SCAG) *Connect SoCal, 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy,* Adopted April 2024	• System Preservation and Resilience • Complete Streets • Transit and Multimodal Integration • Transportation Systems Management (TSM) • Transportation Demand Management (TDM)
Southern California Association of Governments (SCAG) *Southern California Clean Cities Coalition Strategic Plan*, Adopted April 2024	• Support alternative fuel and advanced technology vehicle infrastructure. • Increase the number and accessibility of fueling and charging stations, especially in key transportation corridors. • Promote the adoption of clean and sustainable transportation technologies. • Facilitate the deployment of alternative fuel vehicles and advanced technology vehicles. • Advocate for standardized policies and regulations that support clean transportation.

Title	GHG Reduction Policies or Strategies
	• Collaborate with policymakers to incentivize alternative fuels and cleaner technologies through regulations and financial incentives. • Increase public awareness and involvement in clean transportation initiatives.
Orange County Sustainable Communities Strategy (2011)	• Eliminate bottlenecks and reduce delay on freeways, toll roads, and arterials. • Managing the transportation system (TSM) through measures that maximize the efficiency of the transportation network.
City of Irvine *Climate Action and Adaptation Plan* (drafted September 2025)	**GHG Strategies** • Measure TR-1: Sustainable Transportation & Land Use Planning – Increase high-density, transit-oriented development along primary corridors to reduce VMT Measure TR-3: Transit System Improvement – Enhance and expand transit facilities and infrastructure to access a broader ridership
City of Lake Forest *General Plan* (adopted June 2020)	**Air Quality and GHG Emissions** • Mobility Element M-3: Provide a citywide transportation network that is safe and accessible for all transportation modes and users (Complete Streets) • Mobility Element M-4: Support increased public transportation use in the City (improve local transit, regional connectivity, paratransit)
City of Mission Viejo *Sustainability Action Plan* (adopted March 2013)	**Emissions Inventory, Projections + Goals** • Measure 5 Alternative Transportation: Encourage carpooling, walking, and bicycling as viable transportation modes to decrease the need to drive (Action 5A: Commute Trip Reduction)

Title	GHG Reduction Policies or Strategies
City of Rancho Santa Margarita *General Plan, Conservation/Open Space Element* (adopted February 2020)	**Conservation/Open Space Element** • Air Quality Policy 4.1: Cooperate with regional agencies (SCAQMD, SCAG) in implementing regional Air Quality Management Plan (includes transportation/land use strategies) • Air Quality Policy 4.4: Encourage complete streets improvements and alternative modes of transportation
County of Orange *Preliminary Climate Action Plan Phase* (adopted 02-2026)	**GHG Reduction Goals** • Community Energy Measure C-EJ2: Promote and Expand Active Transportation Networks to Essential Destinations • Community Energy Measure C-EJ4: Work with Orange County Transportation Authority (OCTA) to incentivize Transit-Oriented Development (TOD) in Underserved Communities • Community Mobility Measure C-M4: Support Optimization of Traffic Flow in Unincorporated Areas

2.2.2 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are carbon dioxide (CO_2), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, and various hydrofluorocarbons. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of methane and nitrous oxide. Additionally, the transportation sector emits a minor amount of hydrofluorocarbon emissions, which are related to refrigeration and air conditioning systems used in vehicles.

GHGs vary in their ability to trap heat in the atmosphere, a characteristic known as global warming potential. CO_2 is the most significant GHG due to its abundance and impact, and thus, the amounts of other gases are expressed relative to CO_2 using a metric called “carbon dioxide equivalent” (CO_2e). The global warming potential of CO_2 is assigned as a value of 1, and the global warming potential of other gases is assigned as

multiples of CO_2. Both operational and construction emissions associated with the proposed project are analyzed in the sections below and emission values, if required, are expressed in CO_2e to provide a standardized measure of their impact.

The CEQA Guidelines generally address GHG emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

2.2.2.1 Operational Emissions

The purpose of the proposed project is to rehabilitate pavement, restore drainage systems, and increase safety of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Since the project would not involve adding travel lanes on SR-133 and SR 241, there would be no increase in vehicle miles traveled. While some GHG emissions during construction will occur, the project is expected to yield long-term GHG benefits which may include improved traffic flow, reduced congestion, and smoother pavement surfaces, thereby contributing to lower overall emissions. Improved fuel efficiency due to better maintained roads, and smoother pavement are some project benefits that contribute to lower GHG emissions. In conclusion, the project does not aim to increase operational GHG emissions, thereby providing a positive benefit on the environment

2.2.2.2 Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere, so cannot be considered “temporary” in the same way as criteria pollutants that subside after construction is completed.

Use of long-life pavement, improved traffic management plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities. The table below summarizes estimated construction-related GHG emissions in metric tons per year.

Table 2-2: Construction-related CO2e Emissions by Alternative

Year	Build Alternative
2028	330
2029	684
Total	1,014

Note: Units for alternatives are in Metric Tons of CO_2e (carbon dioxide equivalent)

All construction contracts include Caltrans Standard Specifications related to air quality. Sectio 14-9.02, Section 7-1.02A and 7 1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all California Air Resources Board emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations that reduce construction vehicle emissions also help reduce GHG emissions

2.2.2.3 CEQA Conclusion

While the proposed project would result in GHG emissions during construction, the Build Alternative is not anticipated to have any operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures as stated above, the impact would be less than significant. In addition, Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

2.2.3 Greenhouse Gas Reduction Strategies

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Additionally, Caltrans has enacted policies and initiatives to reduce GHG emissions in transportation to reach the state's climate goals. For a full list of statewide and Caltrans GHG reduction strategies, refer to SER, Chapter 16, Climate Change.

2.2.3.1 Statewide Efforts

In response to AB 32, CARB is implementing the 2022 Scoping Plan for Achieving Carbon Neutrality, which includes measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy.

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Land Use and Climate Innovation (formerly the Governor's Office of Planning and

Research) identified five sustainability pillars in the A Strategy for California @ 50 Million report: (1) Increasing the share of renewable energy in the state's energy mix to at least 50 percent by 2030; (2) Reducing petroleum use by up to 50 percent by 2030; (3) Increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) Reducing emissions of short-lived climate pollutants; and (5) Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits.

The transportation sector is integral to the people and economy of California. As stated in the 2015 California Environmental Protection Agency Environmental Compliance and Enforcement Report, to achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of VMT. Reducing today's petroleum use in cars and trucks is a key state goal for reducing GHG emissions by 2030.

In addition, SB 1386 established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued EO N-82-20 to combat the crises in climate change and biodiversity. It establishes a state goal of conserving 30% of California's lands and coastal waters by 2030 – known as 30x30. This 30x30 goal instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released the Natural and Working Lands Climate Smart Strategy.

2.2.3.2 Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32, EO B-30-15, issued in April 2015, and SB 32 (2016), that set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

The California Action Plan for Transportation Infrastructure 2.0 (CAPTI 2.0) builds on EOs signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI 2.0, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate,

health, and social equity goals. It includes a commitment to working towards VMT/GHG neutrality in key state transportation programs.

The California Transportation Plan (CTP) 2050 is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework.

The Caltrans 2024–2028 Strategic Plan outlines goals centered on safety, climate action, equity, and stewardship. Climate-related strategies include implementing the Caltrans Climate Action Plan; expanding climate education, training, and outreach; strengthening partnerships to support climate resilience; promoting sustainable transportation solutions that reduce emissions; and continuing to engage underserved and disproportionately impacted communities in climate planning and implementation.

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a policy to ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. Other Director's policies promote energy efficiency, conservation, and climate change, and commit Caltrans to sustainability practices in all planning, maintenance, and operations.

The Caltrans Greenhouse Gas Emissions and Mitigation Report provides a comprehensive overview of Caltrans' emissions and current Caltrans procedures and activities that track and reduce GHG emissions. It identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Caltrans and State goals.

Climate Action Plan for Transportation Infrastructure

The California Action Plan for Transportation Infrastructure (CAPTI) builds on EOs signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI 2.0, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals. It includes a commitment to working towards VMT/GHG neutrality in key state transportation programs.

California Transportation Plan

The California Transportation Plan (CTP) 2050 is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework.

SB 391 requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While Metropolitan Planning Organizations have primary responsibility for identifying land use patterns to help reduce GHG emissions, the CTP identifies additional strategies.

Caltrans Strategic Plan

The Caltrans 2024–2028 Strategic Plan outlines goals centered on safety, climate action, equity, and stewardship. Climate-related strategies include implementing the Caltrans Climate Action Plan; expanding climate education, training, and outreach; strengthening partnerships to support climate resilience; promoting sustainable transportation solutions that reduce emissions; and continuing to engage underserved and disproportionately impacted communities in climate planning and implementation.

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Caltrans policy to ensure coordinated efforts to incorporate climate change into Caltrans' decisions and activities.

The Caltrans Greenhouse Gas Emissions and Mitigation Report (2020), (found under the Technical Resources, Tools and Training tab) provides a comprehensive overview of Caltrans' emissions. The report documents and evaluates current Caltrans procedures and activities that track and reduce GHG emissions and identifies additional opportunities for further reducing GHG emissions from Caltrans-controlled emission sources, in support of Caltrans and state goals.

2.2.3.3 Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

GHG-1: The following emissions reduction strategies should be implemented during construction:

- Reduction of construction waste
- Energy efficient construction methodologies
- Fuel efficient measures for equipment and traffic management
- Local materials to be used where feasible/available to reduce GHG emissions
- Reduced frequency of vehicle idle times

2.2.4 Adaptation

While reducing GHG emissions is crucial in combating climate change, it is only one part of the solution. Caltrans must proactively plan for the impact of climate change on California's transportation infrastructure. This involves modifying and protecting facilities to reduce potential damage and build resilience against future climate-related challenges.

Caltrans has conducted District Climate Change Vulnerability Assessments to identify segments of the State Highway System that are vulnerable to climate change impacts, such as sea level rise, increased temperatures, and extreme weather events. These assessments help prioritize areas for adaptation efforts and inform the development of strategies to enhance the resilience of critical infrastructure.

Additionally, Caltrans periodically prepares a Sustainability Roadmap, which outlines the agency's strategic plans and progress reports aimed at achieving state sustainability goals. The roadmap is a two-year progress report on several important milestones achieved by Caltrans while implementing Executive Orders B-16-12, B-18-12, and the adaptation planning process of Executive Orders B-30-15, N-19-19, and N-82-20.

Refer to SER, Chapter 16, Climate Change for additional information regarding federal, state, and Caltrans adaptation efforts.

2.2.4.1 Project Adaptation Analysis

Sea Level Rise

The proposed project is outside the Coastal Zone and not in an area subject to sea level rise. Accordingly, direct impacts on transportation facilities due to projected sea level rise are not expected.

Precipitation and Flooding

This multi-asset project proposes to restore drainage systems, in addition to other improvements. The existing culverts and drainage systems are in poor condition and have lost serviceability due to age, wear, and degradation. This project proposes to cure-in-place, slip line, or replace culverts at various locations. In addition, this projects also proposes to repair the gutter at the retaining wall at the end of the tunnel from NB

SR-241 to SB SR-133. Additional project features, including erosion-control treatments, preservation of existing vegetation where feasible, and implementation of stormwater BMPs (PF-WQ-1 through PF-WQ-4), will further reduce the risk of localized flooding or sedimentation during construction and operation.

The project corridor lies within the Newport Bay, Aliso, and San Juan Creek Watersheds and is mapped largely within FEMA Flood Zone X, meaning it is outside the 0.2-percent annual chance floodplain. The Location Hydraulic Study (LHS) indicates that the proposed work does not constitute a significant floodplain encroachment and that the corridor is not expected to support incompatible floodplain development under existing conditions. No overtopping risks or flood-related structural concerns from other flooding sources have been identified within the project limits.

Climate projections in Southern California indicate an increase in the intensity and frequency of intense precipitation events. District-wide vulnerability assessments indicate that 100-year precipitation depth may increase by approximately 3.5 – 4.1 percent by 2055 and 2.9 – 3.8 percent by 2085 within the project area. These changes could result in higher peak flows at drainage crossings and other drainage features beyond current and historical reflections of hydrologic data.

The project remains within the existing roadway footprint and does not expand impervious surfaces or alter natural drainage features, it is not expected to worsen downstream flooding, redirect flows, or increase erosion hazards. Caltrans will continue coordination with Hydraulics, Design, and Maintenance to ensure that precipitation projections to ensure consistency with current drainage design standards during final design.

Wildfire

The project corridor along SR-241 and SR-133 is located in areas mapped by CAL FIRE as Moderate High and Very High Fire Hazard Severity Zones, particularly where the roadway borders wildland and open-space areas. These areas contain dense native vegetation, rough terrain, and canyons that contribute to elevated wildfire potential. Land use mapping also confirms that portions of the surrounding region are designated as open space, recreation, rural residential, or low-density residential. These conditions collectively indicate that the corridor is exposed to wildfire related stressors both under current and future climate conditions.

Climate change is projected to intensify wildfire hazards in Southern California through hotter temperatures, reduced fuel moisture, prolonged drought cycles, and stronger wind events. However, the project does not introduce new habitable uses or expand the roadway footprint or wildland areas. Standard Caltrans requirements, including vegetation management, fire prevention measures, and proper handling of flammable materials will be implemented to reduce risk.

Fire protection services in the region is provided by the Orange County Fire Authority (OCFA), with multiple stations located within the project corridor. Coordination with OCFA and Caltrans Maintenance will continue during project development to ensure

that project activities and long-term operations do not hinder wildfire response access and that any recommended

Available mapping and the nature of the project indicate that the work is not expected to worsen wildfire risks. The project remains entirely within existing Caltrans right-of-way and does not introduce new habitable structures, increase human activity in undeveloped wildland areas, or place flammable new development in high-hazard zones. The project does not involve new utilities, fuel modification changes, or construction that could alter natural firebreaks or increase ignition probability. As design progresses, Caltrans will document relevant uncertainties and will incorporate any additional adaptation measures recommended through coordination with Maintenance, OCFA, and the PDT.

Temperature

Climate change is projected to increase both average and extreme temperatures in the region, which may affect pavement condition, structural materials, roadside vegetation, and worker safety. Future temperature increases may lead to accelerated pavement wear, material expansion and contraction, and increased heat-related stress on landscaping.

According to the Caltrans Vulnerability Assessment, the project area is expected to experience higher maximum temperatures and more frequent extreme-heat days under future climate scenarios. Project components that may be sensitive to high temperatures such as pavement systems, drainage structures, lighting infrastructure, and landscaping will be designed in accordance with Caltrans standards that presently account for high temperature and material durability. This includes appropriate pavement mixes and expansion allowances for structural elements consistent with District guidance.

The project incorporates heat-resilient features such as durable pavement, restored drainage and culverts and upgraded LED lighting. These measures enhance long-term resilience to rising temperatures and reduce future maintenance needs.

The project remains within existing right-of-way and does not remove shade trees, expand impervious areas beyond existing conditions, or introduce new heat-generating land uses. Therefore, no increase in heat-related hazards is anticipated. Additional adaptive measures will be incorporated if needed as design advances.

2.2.5 References

California Air Resources Board (ARB). 2008. *Climate Change Scoping Plan Appendices. Volume II: Analysis and Documentation.* Appendix I, p. I-19. December. https://ww3.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm. Accessed: June 14, 2024.

California Air Resources Board (ARB). 2021. *SB 375 Regional Plan Climate Targets.* https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: June 14, 2024.

California Air Resources Board (ARB). 2022a. *2022 Scoping Plan for Achieving Carbon Neutrality.* Executive Summary. https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: June 14, 2024.

California Air Resources Board (ARB). 2022b. *Climate Change.* https://ww2.arb.ca.gov/our-work/topics/climate-change. Accessed: June 14, 2024.

California Air Resources Board (ARB). 2023. *California Greenhouse Gas Emissions Inventory Data–2023 Edition, 2000-2021.* https://ww2.arb.ca.gov/ghg-inventory-data. Accessed: June 14, 2024.

California Department of Transportation (Caltrans). 2019. *Caltrans Climate Change Vulnerability Assessments.* District 1 Technical Report. December. Prepared by WSP. https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/air-quality-conformity-and-resiliency-planning/2019-climate-change-vulnerability-assessments.

California Department of Transportation (Caltrans). 2020. Caltrans Adaptation Priorities Reports. District 1 Technical Report. December. Prepared by WSP. https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/air-quality-conformity-and-resiliency-planning/2020-adaptation-priorities-reports.

California Department of Transportation (Caltrans). 2020. *Caltrans Greenhouse Gas Emissions and Mitigation Report*. Final. August. Prepared by ICF, Sacramento, CA. https://dot.ca.gov/programs/public-affairs/mile-marker/summer-2021/ghg. Accessed: June 14, 2024.

California Department of Transportation (Caltrans). 2021a. *California Transportation Plan 2050*. February. California Transportation Plan Updates | Caltrans. Accessed: June 14, 2024.

California Department of Transportation (Caltrans). 2021b. *Caltrans 2024-2028 Strategic Plan.* https://dot.ca.gov/about-caltrans. Accessed: June 14, 2024.

California Department of Transportation. 2023. *Sustainable Operations at Caltrans.* https://dot.ca.gov/programs/sustainability. Accessed: June 14, 2024.

California Governor's Office of Planning and Research (OPR). 2015. *A Strategy for California @ 50 Million.* November. https://opr.ca.gov/planning/environmental-goals/. Accessed: June 14, 2024.

California Natural Resources Agency. 2022. *Nature-Based Climate Solutions: Natural and Working Lands Climate Smart Strategy.* https://resources.ca.gov/Initiatives/Expanding-Nature-Based-Solutions. Accessed: June 14, 2024.

California Natural Resources Agency. 2023. *California Climate Adaptation Strategy.* https://climateresilience.ca.gov/overview/index.html. Accessed: June 14, 2024.

California Ocean Protection Council. 2024. *State Agency Sea-Level Rise Action Plan for California*. February. https://opc.ca.gov/sea-level-rise/. Accessed: June 14, 2024.

California Ocean Protection Council. 2024. *State of California Sea Level Rise Guidance: 2024 Science and Policy Update.* https://opc.ca.gov/2024/06/for-immediate-release-ocean-protection-council-adopts-updated-guidance-to-help-california-prepare-for-and-adapt-to-rising-seas/

California State Transportation Agency. 2021. *Climate Action Plan for Transportation Infrastructure (CAPTI).* https://calsta.ca.gov/subject-areas/climate-action-plan. Accessed: June 14, 2024.

City of Irvine. 2025. Climate Action and Adaptation Plan (Draft). September. PDF. City of Irvine, CA. https://irvinecaap.konveio.com/irvine-climate-action-and-adaptation-plan. Accessed: March 20, 2026.

City of Lake Forest. 2025. Lake Forest 2040 General Plan. July. PDF. City of Lake Forest, CA. https://cms2.revize.com/revize/lakeforest/Documents/Departments/Community%20Development/Planning/Plans%20and%20Standard%20Guidelines/General%20Plan/Lake%20Forest%20General%20Plan%20(excluding%20Housing%20Element)(Revised%207-25).pdf?t=202509121243230&t=202509121243230 Accessed: March 20, 2026.

City of Mission Viejo. 2013. Sustainability Action Plan. March. PDF. City of Mission Viejo, CA. https://www.cityofmissionviejo.org/departments/community-development/planning/general-plan. Accessed: March 20, 2026

City of Rancho Santa Margarita. 2020. General Plan. February. PDF. City of Rancho Santa Margarita, CA. https://www.cityofrsm.org/DocumentCenter/View/5088/RSM-General-Plan-2020-Complete-Document. Accessed: March 20, 2026.

Climate-Safe Infrastructure Working Group. 2018. *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California.* September. https://resources.ca.gov/CNRALegacyFiles/docs/climate/ab2800/AB2800_Climate-SafeInfrastructure_FinalNoAppendices.pdf. Accessed: June 14, 2024.

County of Orange. 2026. Climate Action Plan Phase 2. February. PDF. County of Orange, CA. https://oclandfills.com/sites/ocwr/files/2026-01/FINAL-CAP-PHASE%202-%202026-County-Orange-04a-DIGITAL.pdf Accessed: March 20, 2026.

Federal Highway Administration (FHWA). 2022. *Sustainability.* https://www.fhwa.dot.gov/environment/sustainability/resilience/. Last updated July 29, 2022. Accessed: June 14, 2024.

Federal Highway Administration (FHWA). No date. *Sustainable Highways Initiative.* https://www.fhwa.dot.gov/environment/sustainability/initiative/. Accessed: June 14, 2024.

National Oceanic and Atmospheric Administration (NOAA). 2022. *2022 Sea Level Rise Technical Report.* https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html. Accessed: November 13, 2023.

State of California. 2018. *California's Fourth Climate Change Assessment.* http://www.climateassessment.ca.gov/. Accessed: June 14, 2024.

U.S. Department of Transportation (U.S. DOT). 2014. *Corporate Average Fuel Economy (CAFE) Standards.* https://www.transportation.gov/mission/sustainability/corporate-average-fuel-economy-cafe-standards. Accessed: June 14, 2024.

U.S. Environmental Protection Agency. 2024a. *Data Highlights. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022.* https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: March 19, 2026.

U.S. Environmental Protection Agency. 2024b. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022.* https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: March 19, 2026.

U.S. Global Change Research Program. 2023. *Fifth National Climate Assessment. https://toolkit.climate.gov/NCA5.* Accessed: June 14, 2024.

2.3 CEQA DETERMINATION

PROJECT DESCRIPTION AND BACKGROUND

Project Title: SR-241/SR-133 Multi Asset Project

Lead Agency: California Department of Transportation – District 12

Address: 1750 East 4th Street, Suite 100, Santa Ana, CA 92705

Contact person: Sunny Saroa **Phone number:** (949) 556-2513

Project Location: 12–ORA–241 (PM 15.1/27.8) & 12–ORA–133 (PM 12.8/13.6)

Description of project:

The California Department of Transportation (Caltrans) proposes a multi-asset project to rehabilitate pavement, restore drainage systems, and enhance roadway safety and mobility along State Route 133 (SR-133) and State Route 241 (SR-241) in Orange County, California. The project improvements will extend from Post Mile (PM) 15.1 to PM 27.8 on SR-241 and PM 12.8 to PM 13.6 on SR-133 in the cities of Irvine, Lake Forest, Mission Viejo, Rancho Santa Margarita and Unincorporated County of Orange. Two alternatives are being considered: the Build Alternative and the No-Build Alternative. For details, please refer to Chapter 1.

Surrounding land uses and setting:

The project area includes a mix of residential, commercial, industrial, agriculture, open space, and recreational land uses.

Other public agencies whose approval is required (e.g. permits, financial approval, or participation agreements)**:**

California Transportation Commission

NATIVE AMERICAN CONSULTATION

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) section 21080.3.1? ☒ **Yes** ☐ **No**

If yes, ensure that consultation and heritage resource confidentiality follow PRC sections 21080.3.1 and 21080.3.2 and California Government Code 65352.4

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information

System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project. Please see the Section 2.4 CEQA Checklist for additional information.

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

CEQA DETERMINATION

On the basis of this initial evaluation (choose one):

☐ 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 that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Smita Deshpande	*Smita Deshpande*	May 14, 2026
Print Name	Signature	Date

DIST-CO-RTE: 12–ORA–241 (PM 15.1/27.8) & 12–ORA–133 (PM 12.8/13.6)

EA/Project No.: 12-0T270/1222000027

2.4 CEQA ENVIRONMENTAL CHECKLIST

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

2.4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact
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?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

2.4.1.1 CEQA Significance Determinations for Aesthetics

a) **No Impact**: There are no scenic vistas within the project limits. Therefore, the project will not have any impacts to scenic vistas.

b) **No Impact**: The project is not within a state designated scenic highway and does not include actions that would remove or alter trees, rock outcrops, or historic features. Therefore, scenic resources are not expected to be affected, and no mitigation measures are required.

c) **No Impact**: The project, limited to in-kind rehabilitation within the established roadway footprint and will not substantially degrade public views or the visual character of non-urbanized areas. As the corridor is already a developed transportation corridor, restoration and safety improvements will not alter its appearance. Hence, no mitigation is required.

d) **No Impact**: The project's lighting work consists of upgrading 39 existing streetlight fixtures with light-emitting diodes (LED) in the same locations and does not introduce additional illumination or reflective surfaces. Hence, the project would not create a new source that would affect day or nighttime views.

2.4.1.2 Avoidance, Minimization and/or Mitigation Measures

None required.

2.4.2 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 Department 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:

Question	CEQA Determination
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
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))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
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?	No Impact

2.4.2.1 CEQA Significance Determinations for Agriculture and Forestry Resources

a) **No Impact**: According to the Department of Conservation California's Important Farmland Finder database[1] the project is not in an area of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) and thus would not convert any land to non-agricultural use. There are several areas adjacent to SR 241 of Prime and Unique Farmland lands and with the

[1] California Department of Conservation. CA Important Farmland Finder. https://maps.conservation.ca.gov/dlrp/ciff/. Accessed February 5, 2025.

implementation of PF-AG-1 any construction impact to surrounding areas would be minimized. No mitigation required.

b) **No Impact:** The project area does not conflict with existing agricultural zoning[2], or a Williamson Act Contract[3]. Per the County of Orange General Plan Land Use Element[4], the project area's surrounding land is designated as agricultural, residential, commercial, industrial, open space, and recreational land use. No significant impacts anticipated and no mitigation is required.

c) **No Impact**: There is no land within the project area designated as forest land or timberland. The project will remain within the Caltrans right of way (ROW) and will not interfere with any forest or timberland. Consequently, no mitigation measures are necessary.

d) **No Impact**: See response to (c).

e) **No Impact**: The project will be within the Caltrans ROW and would not involve other changes to the existing environment resulting in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

2.4.2.2 Avoidance, Minimization and/or Mitigation Measures

None required.

[2] County of Orange General Plan. https://ocds.ocpublicworks.com/sites/ocpwocds/files/import/data/files/40235.pdf. Accessed February 05, 2025.
[3] Department of Conservation. 2024 Williamson Act Enrollment Finder. Found here: https://maps.conservation.ca.gov/dlrp/WilliamsonAct/. Accessed 02/05/2026.
[4] County of Orange. August 23,2015 Orange County General Plan, Land Use Element Amendment 14-02. Found here: https://ocds.ocpublicworks.com/sites/ocpwocds/files/import/data/files/58442.pdf, Accessed December 4, 2024.

2.4.3 Air Quality

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

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
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?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

2.4.3.1 CEQA Significance Determinations for Air Quality

a) **No Impact**: The proposed project is located within the South Coast Air Basin under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). According to the Transportation Air Quality Conformity Findings, the project is exempt from conformity requirements under 40 CFR 93.126 because it consists of pavement resurfacing/rehabilitation, safety device upgrades, drainage repairs, lighting rehabilitation, and other non–capacity-increasing improvements. The project does not increase roadway capacity, would not change traffic volumes or patterns, and is included in and conforms with regional planning framework such as SCAG's most recent RTP and RTIP. Overall, the project would not interfere with or obstruct implementation of the applicable Air Quality Management Plans (AQMP). Therefore, the project would result in no impact related to AQMP consistency. No mitigation is required.

b) **Less Than Significant Impact**: The project is exempt under 40 CFR 93.126, and therefore no operational criteria pollutant emissions analysis is required. The project does not add capacity or induce traffic growth. Construction emissions would be temporary and minimized through compliance with Caltrans Standard Specifications Section 14-9 and 14-9.02. Given the project's limited scope, minimal operational emissions, and conformance with standard construction controls, the project would not result in a cumulatively considerable net increase of regional criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant. No mitigation is required.

c) **Less Than Significant Impact**: The project area consists primarily of freeway right-of-way, which does not include sensitive receptors such as residences, schools, or hospitals. Construction-related emissions (diesel exhaust, dust, etc.) would be temporary and controlled through Caltrans Standard Specifications with Caltrans Standard Specifications Section 14-9 and 14-9.02 for air quality and 14-8.02 for noise. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant. No mitigation is required.

d) **Less Than Significant Impact**: Construction activities such as pavement grinding, culvert repair, and equipment operation could generate temporary odors, primarily from diesel exhaust. These construction emissions would be addressed through compliance with Caltrans Standard Specification Section 14-9, which requires adherence to all applicable air pollution control regulations. There are no existing odor sources in the project area, and construction odors would be temporary, minimal, and not expected to affect a substantial number of people due to the project's location within a freeway corridor. As such, impacts related to odors would be less than significant with the Project Features listed below. No mitigation is required.

2.4.3.2 Avoidance, Minimization and/or Mitigation Measures

The following project features would be implemented as part of the project. No avoidance, minimization, or mitigation measure are required.

PF-AQ-1: The construction contractor must comply with the Department Standard Specification in Section 14-9, Air Quality (2025), which specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances.

2.4.4 Biological Resources

Would the project:

Question	CEQA Determination
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, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant Impact
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?	Less Than Significant Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
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?	Less Than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

2.4.4.1 CEQA Significance Determinations for Biological Resources

The potential for the Build Alternative to result in significant impacts related to biological resources was assessed in the *Natural Environment Study – Minimal Impacts* (NES-MI) (March 2026) prepared for this project. The following analyses are based on the information described in that technical study and impacts to biological resources are summarized below:

The following electronic databases were consulted for species that could potentially occur within the vicinity of the BSA:

- United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) (November 2025)
- National Oceanic and Atmospheric Administration (NOAA) (November 2025)
- California Natural Diversity Database (CNDDB), Rarefind 5 (November 2025)

The BSA consists of the project footprint and a variable buffer around the project footprint. The BSA encompasses all of the potential direct and indirect impacts to biological resources within the project area. Direct impacts include both permanent and temporary impact areas that correspond with the project footprint. Indirect impacts include impacts such as noise and lighting that may occur during construction. In fully developed areas, the BSA only goes up to the edge of the State right-of-way. Within undeveloped areas, the BSA was determined by what project activities are occurring within the area. In most of these areas, the BSA goes to 500 feet past the project footprint. One exception is the southern-most work location. At this location, there is a 100-foot buffer around the project activities, due to the impacts being within an existing electrical cabinet. Areas where there is no project work but are within the project postmile footprint the BSA is delineated to the edge of pavement.

The results presented in this NES-MI are based on recent literature searches, field surveys and habitat suitability.

Vegetation communities and land cover mapped within the BSA include coastal sage scrub (CSS), riparian, annual grassland, farmland, ornamental, and ruderal vegetation.

Coastal Sage Scrub

CSS is a protected habitat type that typically consists of a mix of the following: California sagebrush (Artemisia californica), California sunflower *(Encelia californica*), brittlebush (*E. farinosa*), California buckwheat (*Eriogonum fasciculatum*), rabbitbrush (*Ericameria palmeri*), and various species of Salvia species, including white sage (*S. apiana*), purple sage (*S. leucophylla*), and black sage (*S. mellifera*). Within the BSA, the CSS habitat quality is mixed. Areas adjacent to the roadside are frequently mixed with annual grasses and mustard species. Trash is also frequent along the roadside. In developed areas of the BSA CSS is fragmented. In other areas of the BSA, CSS is high quality with more extensive coverage. This higher quality CSS is found generally further from the roadway and other developments.

Riparian

Within the BSA, riparian woodland consists mainly of *Platanus racemosa* (California sycamore), willow species (*Salix* sp.), *Washingtonia robusta* (Mexican fan-palm), *Arundo donax* (arundo). Other riparian species, both native and nonnative, are also found within these woodlands. Riparian woodlands are reliant on adjacent water. Within the BSA, there are ephemeral and perennial creeks which provide water to the riparian species.

Annual Grassland

Grasslands within the BSA consist of generally nonnative annual grass species. Oats (*Avena sp*.) and brome (*Bromus sp*.) make up the majority of the grasses in these areas. In these areas there is also a heavy layer of mustard (*Brassica nigra*) and other invasive forbs. Some native plants may grow in these areas, but they are scattered.

Farmlands

This vegetation type consists of active agricultural fields. This area is actively managed and can be considered part of the development within the BSA. These areas can provide food and shelter for various species, but it is generally not high quality habitat due to human disturbance and monoculture of plant species.

Ornamental

Within the BSA, ornamental vegetation can be found along highways, generally at on- and off-ramps, in local parks, and as landscaping for business and residential areas. Much of the BSA has native species making up the ornamental vegetation, but nonnative species can be found as well. Nonnative species can include eucalyptus trees (*Eucalyptus* sp.), pine trees (*Pinus* sp.), Peruvian pepper tree (*Schinus molle*), and a variety of shrub species. Ornamental vegetation can act as food and shelter sources for various species but is generally considered low quality habitat.

Ruderal

This vegetation type is similar to the annual grasslands. It occurs adjacent to much of the ornamental vegetation and roadsides is ruderal vegetation. This vegetation type consists of mostly nonnative species that are adapted to growing in disturbed habitats. Generally this vegetation type is different from grasslands in that there is bare ground in between plants. Some native species exist within ruderal areas, but these are generally considered weedy due to their correlation with disturbance. Species within these areas can vary greatly depending on time-of-year and precipitation amounts. Generally, within the BSA species include black mustard and Russian thistle (*Salsola sp.*)

a) **Less Than Significant Impact**:

Special Status Plants

Plants are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on site. Habitat for the following species is found within the BSA: thread-leaved brodiaea, California satintail, Robinson's pepper-grass, intermediate monardella, mud nama, Allen's pentachaeta, white rabbit-tobacco, and chaparral ragwort. Impacts for this project are limited to ornamental and ruderal vegetation which do not support any special status plant species. Therefore, no special status plant species are anticipated to be impacted as a result of this project.

Special Status Animals

Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring on site. See Table 1 for special status species that may be found in the BSA.

There are 15 animal species listed or proposed for listing as either threatened or endangered under the Federal Endangered Species Act (FESA) or the California Endangered Species Act (CESA) and 3 of these species are dually listed or proposed to be dually listed (Federal and State). Other animal species are listed as a California Species of Special Concern (SSC), Fully Protected (FP), or Watch List (WL). These species are not listed on either endangered species list but are protected more than regularly occurring species in California due to their rarity to occur within the State or their populations have been declining due to various factors. The CDFW has jurisdiction over SSC, FP, and WL species. These species have the potential to occur within the project regions based on the CNDDB database searches. Although not considered special-status animal species under USFWS or CDFW jurisdiction, migratory and non-game birds are protected along with their nests under the Federal Migratory Bird Treaty Act (16 USC 703–712) and by California Fish and Game Code Sections 3503, 3503.5, and 3800. These laws prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering for sale, purchase, or barter, of any migratory bird and its eggs, parts, and nests, except as authorized under a valid permit. Various migratory and non-game bird species have the potential to occur within the project areas.

Several species may be found or may have suitable habitat within the BSA (Table 2-3) but are not within or adjacent to project impact areas. For these species there will not be any detailed discussion. Species with the potential to be impacted by project activities are discussed in the sections below.

Table 2-3: Federal Endangered Species Act Consultation Summary

Scientific Name	Common Name	Status	Effect Determination	Rationale
Anaxyrus californicus	arroyo toad	FE	No effect	No project impacts are anticipated within suitable habitat.
Spea hammondii	western spadefoot	FPT	No effect	No project impacts are anticipated within suitable habitat.
Empidonax traillii extimus	southwestern willow flycatcher	FE	No effect	No suitable habitat within BSA.
Polioptila californica californica	coastal California gnatcatcher	FT	No effect	No project impacts are anticipated within suitable habitat.
Vireo bellii pusillus	least Bell's vireo	FE	No effect	No project impacts are anticipated within suitable habitat.

Scientific Name	Common Name	Status	Effect Determination	Rationale
Branchinecta sandiegonensis	San Diego fairy shrimp	FE	No effect	Project impacts near the critical habitat are limited to the sidewalk.
Streptocephalus woottoni	Riverside fairy shrimp	FE	No effect	Project impacts near the critical habitat are limited to the sidewalk.
Oncorhynchus mykiss irideus	South coast Steelhead DPS	FE	No effect	No suitable habitat within BSA.
Rhinichthys gabrielino	Santa Ana speckled dace	FPT	No effect	No suitable habitat within BSA.
Danaus plexippus	Monarch butterfly	FPT	No effect	Project will not significantly impact nectar-producing plants.
Euphydryas editho quino	Quino checkerspot butterfly	FE	No effect	Species only known to Riverside and San Diego counties.
Berberis nevinii	Nevin's barberry	FE	No effect	No suitable habitat within BSA
Brodiaea filifolia	thread-leaved brodiaea	FT	No effect	Project impacts near suitable habitat are limited to paved roadway.
Dudleya cymosa ssp. *ovatifolia*	Santa Monica Mountains Dudleya	FT	No effect	No suitable habitat within BSA.
Actinemys pallida	southwestern pond turtle	FPT	No effect	No project impacts are anticipated within suitable habitat.
Coastal California Gnatcatcher Critical Habitat		CH	No effect	Project impacts near the critical habitat are limited to the paved roadway.
Riverside Fairy Shrimp Critical Habitat		CH	No effect	Project impacts near the critical habitat are limited to the sidewalk.

Coastal California Gnatcatcher

CSS, annual grassland, and riparian vegetation exist both within and outside of the BSA, including outside of the road shoulder and within the median. Critical habitat for this species overlaps with the BSA. CSS within the BSA includes typical species described in section 3.1.2 Physical and Biological Conditions. CSS within the BSA is

generally connected to CSS outside of the BSA. Grassland within the BSA occurs in similar areas and is generally made up of nonnative annual grasses. Riparian vegetation adjacent to CSS exists at Tijeras Creek, within the critical habitat area, and just north of Portola Parkway.

A large part of the BSA is developed. Much of the CSS is directly adjacent to the roadway and other developed areas. Permanent lighting structures line much of the BSA and shine into the CSS and other habitats. Roadway noise is high along the entire route. No protocol surveys were completed for CAGN, but any wildlife in this area is likely accustomed to high levels of noise and lights from the existing roadway. Several sections of CSS are patches between the roadway and housing developments. CAGN likely use these sections for foraging and dispersal rather than nesting due to the patches being small and highly disturbed. Some sections of the CSS are more intact with the CSS continuing outside of the BSA. These areas are more likely used for all stages of the CAGN lifecycle.

Overall, there is suitable habitat throughout the BSA, but habitat quality is varied.

Vegetation removal for this project is limited to ornamental, annual grassland, and ruderal areas. No CSS is proposed to be removed as part of the project. ESA fencing will be used where project work is adjacent to CSS to avoid any direct impacts. Therefore, no direct impacts to CAGN are anticipated. Grassland to be removed is all directly adjacent to the roadway. As stated above, wildlife within the BSA are likely accustomed to some increased levels of noise and lighting. Indirect impacts from lighting will be minimized using the measure below. Noise impacts are not expected to increase above the ambient traffic noise.

A No Effect determination has been made for this species.

Western Spadefoot

The western spadefoot southern distinct population segment (DPS) is proposed as a threatened DPS under the FESA. This species is a small amphibian is identified by it’s small “spade” on both back feet, small, black, and wedge-shaped. This spade helps the spadefoot dig into the ground to burrow underground. This underground burrow keeps the species from drying out due to the dry weather in late spring to early fall.

This species spends most of its life in terrestrial habitats of grassland, scrub, woodlands with close proximity to a water source. The western spadefoot needs the nearby aquatic habitat for breeding. Vernal pools are the main source of aquatic habitat, but other types of wetlands, natural or manmade, are also used.

No formal protocols were completed for this species due to the limited project scope in or near suitable habitat. Known records for this species can be found just outside of the BSA along SR-241 near Antonio Parkway adjacent to the Riverside Fairy Shrimp critical habitat. Both species use vernal pools and nearby is open space of

scrub and grassland. Habitat and historic records can also be found along the various creeks and washes throughout the BSA.

No impacts are anticipated for this species. All project work is within previously disturbed areas and away from streams, therefore, no direct impacts are anticipated. No indirect impacts are anticipated as all project work is within the highway road prism which has elevated noise and light levels.

A No Effect determination has been made for this species.

Migratory Birds

Migratory birds are protected by the Migratory Bird Treaty Act and California Fish and Game Code 3503, 3503.5, and 3513. Several migratory birds are anticipated within the project area. Many of these species are also on CDFW's special animals list, meaning they are tracked using the CNDDB. Several of these species are migratory elsewhere but in southern California are generally year-round residents. Others are migrants and either winter in southern California or migrate to southern California for breeding season. Some of these include:

- Grasshopper sparrow
- Golden eagle
- Long-eared owl
- Cooper's hawk
- Burrowing owl
- Ferruginous hawk
- Coastal cactus wren
- Northern harrier
- White-tailed kite
- California horned lark
- Yellow-breasted chat
- Yellow warbler
- Least Bell's vireo

Other potential migratory birds that may be found in the project area are listed in Appendix C.

Potential habitat for migratory birds can be found throughout the project area. Many migratory species have adapted to using ornamental or even ruderal habitats to forage and nest. Because of this, migratory bird species may be found within the project area during construction. Generally, most of the work areas are within the median or directly adjacent to SR-241. These areas are fairly disturbed either by direct human presence (maintenance workers, etc.), or by general traffic noise from cars on the highway. Many of the areas where work is occurring have permanent light fixtures, adding to the disturbance. Because of these factors, project areas may be unsuitable for most wildlife. Wildlife that do use these areas are likely accustomed to a high disturbance level.

Temporary and permanent impacts will occur to ornamental, grassland, and ruderal vegetation as part of this project. Removal of any vegetation may result in direct impacts to migratory birds. Indirect impacts may occur from additional temporary lighting and noise from construction.

PF-BIO-3 and **PF-BIO-4** are project features that will be implemented as part of the project to avoid impacts to these species.

All species on the IPaC list have been given a No Effect determination. No FESA consultation will occur for any species as part of this project.

No CESA consultation will be required for this project. All CESA-listed species have either no suitable habitat within the BSA or project will not impact suitable habitat for any CESA-listed species. No take of any state-listed species is anticipated.

No Essential Fish Habitat was found in the BSA. Therefore, no consultation with NOAA Fisheries was completed.

b) Less Than Significant Impact:

Habitat and Natural Communities of Special Concern

Habitats are considered to be of special concern based on (1) federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status plants or animals occurring in the BSA. Such sensitive habitats are often designated by CDFW as natural communities of special concern.

Designated critical habitat is a formal identification of areas by USFWS that are essential to the conservation of federally listed species. These areas are chosen with respect to physical and biological features of a site, and the range occupied by the species. Critical habitat must contain at least one primary constituent element that allows for at least one of the primary biological functions of the species, such as foraging, nesting, and dispersal. Within designated critical habitat areas, areas of development, such as roads, are typically excluded from the mapped boundaries of the critical habitat. The BSA overlaps with coastal California gnatcatcher and Riverside fairy shrimp critical habitat.

<u>Coastal California Gnatcatcher Critical Habitat</u>

Part of the BSA overlaps with 37.96 acres of Unit 7 (per revised ruling by USFWS on December 19, 2007) of Designated Critical Habitat for coastal California gnatcatcher (CAGN). This critical habitat unit was designated due to its core populations and presence of CSS. Physical and biological features of CAGN critical habitat include (1) coastal sage scrub habitat and (2) chaparral, grassland, and riparian habitats within close proximity to CSS. Both of the physical and biological features for CAGN critical habitat are within unit 7.

CSS is one of the physical and biological features of CAGN critical habitat. CSS provides space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal, and foraging. This habitat type is dominated by various shrub species, but generally has some assortment of sage species, California sagebrush, and California buckwheat. These plant species, along with other associated species, are generally low growing, drought tolerant shrubs.

The second physical and biological feature is non-sage scrub habitats, such as chaparral, grasslands, riparian areas, in proximity to CSS habitat. These other habitats provide dispersal space, foraging, and nesting potential for CAGN.

The BSA overlaps CAGN critical habitat near postmile 23.86 to 24.57. The critical habitat is outside of the Caltrans ROW. Vegetation within the critical habitat area includes coastal sage scrub, annual grassland, riparian, and ruderal areas. Just outside of the BSA is farmland. The majority of the vegetation is somewhat fragmented coastal sage scrub and annual grassland. Developments in and adjacent to the critical habitat include warehouses, residential homes, farmland, and SR-241.

Disturbance in this area is limited. Wildlife are likely accustomed to a low level of disturbance from the existing roadways and adjacent developments, but generally this area contains high quality, suitable habitat for CAGN.

No direct impacts are anticipated to any critical habitat areas. Project work in this area is limited to the existing paved roadway. Indirect impacts in the form of increased light and noise may occur from this project, but it will be temporary. There are no permanent noise or lighting increases proposed as part of this project. With the avoidance and minimization measures below, no impacts are anticipated to the CAGN critical habitat.

A No Effect determination has been made for the coastal California gnatcatcher critical habitat.

PF-BIO-1 and **PF-BIO-3** are project features that will be implemented as part of the project to avoid impacts to this habitat.

Riverside Fairy Shrimp Critical Habitat

Riverside fairy shrimp is an invertebrate listed as endangered under the federal endangered species act. Critical habitat has been designated for this species. Riverside fairy shrimp rely on vernal pools for all stages of their life. As such, critical habitat areas contain vernal pools or artificial structures that act as vernal pools, such as cattle ponds and roadside ditches. Primary constituent elements for this species' critical habitat are (1) ephemeral wetland habitat with vernal pools that have a dry down period that allows them to complete their life cycle, (2) adjacent upland and wetland habitat that allows for the development of vernal pools, (3) soils with clay or other impermeable surfaces that allowing for ponding in the winter and spring.

The BSA overlaps a small portion of Unit 2e of Riverside fairy shrimp. This unit contains all three of the primary constituent elements for Riverside fairy shrimp lifecycle

Critical habitat for the Riverside fairy shrimp is directly adjacent to the BSA near Antonio Parkway. Within this area the BSA is contained to the paved roadway due to lack of project work in this area. The vegetation in this critical habitat area comprises of grassland, Tijeras Creek and associated riparian vegetation, and coastal sage scrub. There is also a small pond. Nearby developments consist of the highway, a trail system, residential neighborhoods, schools, and businesses. Artificial lights from the nearby developments create some night lighting in the area, but it is likely minimal.

Critical habitat for the Riverside fairy shrimp overlaps the BSA near Antonio Parkway at the SR-241 northbound off-ramp. Within the BSA, this area has CSS, ornamental, ruderal, and riparian vegetation. Outside of the BSA contains large areas of CSS and riparian vegetation. Nearby developments consist of the State highway, a trail system, residential neighborhoods, schools, and businesses. There are permanent lighting structures along the off-ramp and Antonio Parkway.

No impacts to the critical habitat area are anticipated. Project work near the critical habitat area consists of curb ramp upgrades. This work is occurring within developed areas at the Antionio Parkway intersection and outside of the critical habitat. No direct impacts are anticipated from this work. Indirect lighting impacts will be minimized with the implementation of project feature **PF-BIO-1**.

A No Effect determination has been made for the Riverside fairy shrimp critical habitat.

Coastal Sage Scrub

CSS is a protected habitat type that typically consists of a mix of the following: California sagebrush, California sunflower, brittlebush, California buckwheat, rabbitbrush, and various sage species. This community is generally drought tolerant. This habitat was previously very common in southern California and Orange County, but has been removed or degraded due to development and increasingly frequent wildfires. This habitat type provides habitat for many species, including many listed species such as California Gnatcatcher (CAGN) and Least Bell's Vireo (LBVI).

CSS can be found throughout the project limits. Within the BSA, the CSS habitat quality is mixed. Areas adjacent to the roadside are frequently mixed with annual grasses and mustard species. Trash is also frequent along the roadside. In developed areas of the BSA CSS is fragmented. In other areas of the BSA, CSS is high quality with more extensive coverage. This higher quality CSS is found generally further from the roadway and other developments.

No direct impacts to CSS are anticipated for this project. Work will occur adjacent to areas of CSS within grassland, ruderal, and developed areas of the project.

Environmentally sensitive area fencing will be used to protect CSS directly adjacent to project work areas. **PF-BIO-1** and **PF-BIO-2** are project features that will be implemented as part of the project to avoid impacts to this habitat.

Riparian

Riparian habitat can be found at Tijeras Creek, Arroyo Trabuco, a small area north of Alton Parkway, and a small area north of Portola Parkway. There is no work proposed for any of these waterways. Work near riparian areas is within developed areas and is not anticipated to impact any riparian areas. No impacts are anticipated for any riparian habitat.

c) **No Impact:** Drainage work is limited to a pipe fully underground beneath the paved roadway. Best management practices will be implemented to ensure no discharge occurs to any jurisdictional waterways. While the project does cross over various streams, no jurisdictional wetlands and waters are proposed to be impacted as part of this project.

d) **Less Than Significant Impact:**

Within the BSA, there are several areas that contribute to habitat connectivity. While the majority of the BSA is within developed areas of Orange County, the BSA also crosses through undeveloped, protected areas of the county. There are various parks that are bisected by SR-241. Areas where there are bridges and culverts along SR-241 likely act as habitat connectivity areas. Wildlife may use bridges or culverts within the BSA to pass under SR-241 to reach other undeveloped areas in the vicinity of the BSA, and even other natural areas in the county. Natural creeks such as Tijeras Canyon and Arroyo Trabuco facilitate habitat connectivity due to natural vegetation cover and access to water for various wildlife species.

The project area is adjacent to the Santa Ana Mountains, which provides habitat and cover for movement of animals within the Central-Coastal NCCP/HCP Reserve. Active construction activities may temporarily deter wildlife movement due to increased noise and human activity, but wildlife is expected to continue to use corridors when construction work is not occurring, particularly at dawn and dusk.

No permanent barriers would be placed within any known wildlife movement corridors. As such, implementation of the proposed project is not expected to permanently affect wildlife movement or decrease the functionality of any wildlife crossings; therefore, no project-specific mitigation would be required. Therefore, implementation of the project would have a less than significant impact on wildlife movement through the BSA.

Caltrans is required by Senate Bill (SB) 857 to construct projects without presenting barriers to fish passage or to remediate existing barriers. There is no

essential fish habitat or critical habitat for any fish species within the BSA. No anadromous fish habitat exists within the BSA.

The BSA contains potentially suitable habitat for migratory birds and raptors protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. These species may nest in the vegetation or structures within the BSA. Caltrans anticipates the general bird nesting season to occur between February 1 and September 30. Migratory and nesting birds may be found within the project limits. Migratory birds use many types of vegetation for nesting. Vegetation removal may impact nesting birds. In addition to standard specifications, **PF-BIO-3** and **PF-BIO-5 a**re project features that will be implemented as part of the project to avoid impacts to migratory bird species.

e) **No Impact**: Ornamental tree removal may occur as part of this project within Caltrans ROW. No work is anticipated outside of Caltrans ROW. Therefore, the project would not conflict with such policies, and no impacts would result.

f) **No Impact:** Portions of the BSA are within the Planning Areas of the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan (OC NCCP/HCP) as well as the Orange County Transportation Authority (OCTA) Measure 2 (M2) NCCP/HCP. Project work will occur within the Caltrans ROW, and no project work will occur within OCTA M2 NCCP/HCP conservation areas. Caltrans is not a participant of the OC NCCP/HCP and is a Participating Special Entity of the OCTA M2 NCCP/HCP; however, maintenance of the Caltrans infrastructure within the OC NCCP/HCP and OCTA M2 NCCP/HCP is allowed. As such, the proposed project would not conflict with the OC NCCP/HCP or OCTA M2 NCCP/HCP, and no further compliance besides that described in this document is required.

2.4.4.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the following avoidance and minimization measures will be implemented as part of the project:

PF--BIO-1: Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.

PF-BIO-2: Construction equipment/vehicle staging, storage, maintenance, and dispensing of fuel/oil shall occur within the paved road unless approved by the Caltrans Biologist.

PF-BIO-3: Night work shall be avoided. If night work is necessary, all lighting used at night for project construction will be of the lowest illumination necessary for human safety and will be selectively placed and directed at the immediate work area and away from adjacent habitats, specifically coastal sage scrub. Light glare shields will be used to reduce the extent of illumination into habitats.

PF-BIO-4: Work within 500 feet of suitable CAGN habitat shall avoid the CAGN nesting season (February 15 – August 31). If work must occur during the CAGN nesting season, a Caltrans biologist will conduct a preconstruction survey for gnatcatchers within 3 days of the start of work within 500 feet of suitable habitat. If CAGN are found, the Caltrans biologist will coordinate with USFWS. No work will occur within 500 feet of the active nest without written approval from USFWS.

PF-BIO-5: Work shall occur outside of the nesting bird season (February 1 – September 30). If any vegetation removal must occur during the nesting bird season, then a pre-construction survey by a Caltrans Biologist must be conducted within 72 hours prior to the start of work. The RE must request the nesting bird survey with at least 2 weeks of a notice to the Caltrans Biologist. If any active nests are found, the Caltrans Biologist will determine a no work buffer (up to 500 feet) and if any resource agency coordination needs to occur.

PF-BIO-6: Any vegetation removal that may include invasive plant species will be properly disposed of at a landfill, or similar. No plant materials will be disposed of will be disposed of within the project site.

PF-BIO-7: Equipment will not be cleaned within 250 feet of a waterway or upslope of a waterway where plant materials could be washed downhill into a waterway.

PF-BIO-8: Revegetation and landscaping efforts will not include any plant species known to be invasive by either the California Invasive Plant Council or the US Department of Agriculture.

2.4.5 Cultural Resources

Would the project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact

2.4.5.1 CEQA Significance Determinations for Cultural Resources

The potential for the Build Alternative to result in significant impacts related to cultural resources was assessed in the Historic Property Survey Report (HPSR; March 2026).

a) **Less Than Significant Impact:** CEQA defines a "historical resource" as a resource that meets one or more of the following criteria: (1) listed in, or determined eligible for listing in, the California Register of Historical Places (California Register); (2) listed in a local register of historical resources as defined in the California Public Resources Code (PRC) §5020.1(k); (3) identified as significant in a historical resource survey meeting the requirements of PRC §5024.1(g); or (4) determined to be a historical resource by a project's Lead Agency (PRC §21084.1 and State CEQA Guidelines §15064.5(a)). A record search of the Area of Potential Effects (APE) and a 1/2-mile radius around the APE was conducted on January 26, 2026. The record and literature search identified 25 historic properties within a ½ mile of the project area. Of the identified historic properties, 4 are determined to be mapped within the horizontal APE; however, all 4 are outside of the direct APE and will not be affected by planning-construction, hence no historic properties will be affected by the Project, and these properties are exempt from further review. The proposed project would not cause a substantial change in the significance of a historical resource as defined in §15064.5. No mitigation is required. Project Feature PF-CUL-3 addresses the cultural sensitivity training required prior to the start of construction to bring awareness of cultural sensitivity along the APE.

b) **Less Than Significant Impact:** Based on the results of the background research, no known archaeological resources will be affected by the Project. The record and literature search identified 25 historic properties within a ½ mile of the project area. Of the identified historic properties, 4 are determined to be mapped within the APE, however all 4 are not impacted by the planned work locations, hence, no historic properties will be affected by the Project and these properties are exempt from further review.

   While not anticipated, if cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area would be

diverted until a qualified archaeologist can assess the nature of the find. Project Feature PF-CUL-1 addresses the possibility of discovery of cultural materials during construction.

c) **Less Than Significant Impact:** While not anticipated, if human remains are discovered during construction, all earthmoving activity within and around the immediate discovery area would be diverted until the Orange County Coroner can assess the nature of the find. Project Feature PF-CUL-2 addresses the possibility of discovery of human remains during construction.

2.4.5.2 Avoidance, Minimization and/or Mitigation Measures

Although no mitigation will be required for the project, the following project features will be implemented as part of the project:

PF-CUL-1 Discovery of Cultural Materials. If buried cultural resources are encountered during Project Activities, it is the Department policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.

PF-CUL-2 Discovery of Human Remains. In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 12 Division of Environmental Analysis; Environmental Branch Chief (EBC) and District Native American Coordinator, DNAC. Further provisions of PRC 5097.98 are to be followed as applicable.

PF-CUL-3 Cultural Sensitivity Training. Cultural Sensitivity Training must be provided to the Contractor prior to the start of construction at the pre-construction meeting and/or the construction kick off meeting. This training can be done separately or in conjunction with other environmental training (i.e. WEAT/WEAP/Biological Awareness Training).

2.4.6 Energy

Would the project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Less Than Significant Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.4.6.1 CEQA Significance Determinations for Energy

a) **Less Than Significant Impact:** The proposed project is not capacity-increasing project, thus operational energy consumption is not needed. Based on the available information, energy consumption during the construction of this project is calculated using the Cal-CET 2021 (v 1.04). There would be energy consumption of 11,988 MMBTU during the construction period. The construction of the proposed project will primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Energy use associated with proposed project construction is estimated to increase the short-term energy demand through related construction activities. This short-term energy demand would cease once the construction of the project is complete. Regarding long-term and permanent energy consumption, it would be limited to some electricity for lighting and occasional maintenance activities. The impact would be less than significant, and no mitigation is required.

b) **No Impact:** The project would be consistent with regional and State energy conservation plans and the Southern California Association of Governments' (SCAG) Connect SoCal, the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)[5]. The result of the project will not conflict with or obstruct local plans for renewable or energy efficiency.

2.4.6.2 Avoidance, Minimization, and/or Mitigation Measures

None required.

[5] Southern California Association of Governments (SCAG). https://scag.ca.gov/connect-socal, accessed on December 4, 2024.

2.4.7 Geology and Soils

Would the project:

Question	CEQA Determination
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Less Than Significant Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant with Mitigation Incorporated

2.4.7.1 CEQA Significance Determinations for Geology and Soils

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

i) **No Impact**: The project site is not located within an Alquist-Priolo Earthquake Fault Zone (EFZ) as defined by the California Geologic Survey (CGS), and review of the CGS Quaternary Fault and Fold Database indicates no mapped Holocene-age (11,000 years) faults with surface rupture potential within 1,000 feet of the site. Therefore, the project would not expose people or structures to surface faults rupture hazards. No mitigation is required.

ii) **No Impact**: The location of the project site is an area that could experience moderate seismic ground shakings from possible earthquakes. However, the project would not cause strong seismic ground shaking and none of the structures need to be designed with special design considerations for seismic features. Therefore, there is no impact, and no mitigation is required.

iii) **No Impact**: Select locations of the project are mapped by the CGS as being susceptible to liquefaction, however many of these locations are creeks and river channels that are spanned by bridges or roadway embankment, and not susceptible to liquefaction. Also, the improvements proposed by this project are minor structures that do not need liquefaction-resistant design procedures.

iv) **No Impact**: Select locations of the project are mapped by the CGS as being susceptible to seismically-induced landslides, however many of these locations were graded during construction of the roadway and are designed for global seismic stability. None of the project components will destabilize the existing slopes.

b) **No Impact**: No cuts or fill slopes are planned as part of the project and the planned structures do not increase the rate or risk of erosion; no mitigation is required.

c) No Impact: The potential for landslides, liquefaction, lateral spreading, collapse and subsidence is minimal at the project site. No mitigation is required.

d) **Less Than Significant:** The area surrounding the 133/241 connectors has been documented as having expansive soils in the native bedrock cut surfaces. These expansive soils caused differential vertical uplift of the pavement and affected the pavement quality. The rest of the project limits have not been affected by expansive soils in the past. The construction activities and operation of this project will not result in creation of substantial risks to life or property as the project proposes to rehabilitate pavement, restore drainage systems, and enhance roadway safety and mobility. Therefore, there will be no impact regarding unstable geologic unit or soils nor expansive soils. No mitigation is required.

e) **No Impact**: There are no soils incapable of supporting the use of septic tanks or alternative waste water disposal systems within the project limits. No mitigation is required.

f) **Less Than Significant Impact with Mitigation Incorporated**: Build Alternative improvements are anticipated to have direct impact to any potentially sensitive paleontological resources with the exception of Project-related excavations that would occur on Artificial Fill (Qaf) and younger Holocene Alluvial deposits (Qal, Qya, Qyl) as these deposits are not likely to encounter scientifically significant fossils because these deposits have no to low paleontological sensitivity.

The high paleontological potential to impact Paleontological resource would occur within the majority of the Project Area at surface or shallow depths, specifically within those deposits located along SR-241 that belong to older deposits belonging to undetermined Holocene to Late Pleistocene-age landslide (Qls), the Tertiary-age Capistrano Formation, Oso Member (Tco), the Puente Formation (Soquel and La Vida Members) (Tput), Vaqueros and Sespe Formations, Silverado Formation (Tsi) and the Cretaceous-age Williams Formation, Pleasant Member (Kwi) (SVP, 2010). Additionally, the presence of paleontological collection localities within the immediate and 1-mile vicinity of the Project Area suggest the potential for construction of the proposed Project to result in impacts to paleontological resources. Any proposed excavation activities that have the potential to encounter high Paleontologically sensitive units at surface level or within greater depths in undisturbed deposits of these geologic units (i.e., below the depth of any previously imported artificial fill or disturbed sediments present along the Project alignment) have the potential to impact the paleontological resources preserved therein.

Project Feature PF-PAL-1 addresses the possibility of discovery of paleontological resources during construction. Measures **PAL-1** and **PAL-2** will require the preparation and implementation of a Paleontological Mitigation Plan (PMP) and a Mandatory Paleontological Awareness Training. With the implementation of these measures, potentially significant impacts to paleontological resources would be reduced to a less than significant level.

2.4.7.2 Avoidance, Minimization and/or Mitigation Measures

The following project feature, and minimization, and mitigation measures would be implemented as part of this project:

PF-PAL-1 **Discovery of Unanticipated Paleontological Resources.** If unanticipated paleontological resources are discovered during Project Activities, it is Caltrans policy that work stop within 60 feet of the area until a Caltrans Project Paleontologist/Archaeologist can evaluate the nature and significance of the find.

PAL-1 A Paleontological Mitigation Plan (PMP) will be required at 65% PS&E that outlines the mitigation measures for paleontological services adhered during construction.

PAL-2 PMP (Pre-Construction) Mandatory Paleontological Awareness Training (30 mins) conducted by District 12 Archaeologist or/Paleontologist, will be conducted prior to any construction work for all parties that will be onsite.

2.4.8 GHG Emissions

Would the project:

Question	CEQA Determination
a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	No Impact

2.4.8.1 CEQA Significance Determinations for GHG Emissions

a) **Less Than Significant Impact**: The proposed project consists of rehabilitation and safety improvements along SR-241 and SR-133, all of which are maintenance activities rather than capacity-increasing activities. Thus the project would not expand roadway capacity or induce additional vehicle travel, and would not result in an increase in operational greenhouse gas (GHG) emissions. Construction activities would produce temporary GHG emissions associated with pavement resurfacing, drainage repairs, lighting conduit replacement, and similar rehabilitation work. Based on the available information, construction GHG emissions is calculated using the Cal-CET 2021 (v 1.0.4), which estimates there would be 1,014 MT of GHG emission from the project during the construction of this project. Construction contractors will be required to comply with Caltrans 2025 Standard Specifications Section 14-9, and specifically section 14-9.02 which ensures adherence to applicable air quality and environmental regulations, thereby minimizing construction-related GHG emissions. Emission reduction strategies listed under **GHG-1** will be implemented as a measure to minimize impacts. For these reasons, the impact related to GHG generation would be less than significant, and no mitigation is required.

b) **No Impact**: The project is located within the South Coast Air Basin, within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB) and must demonstrate consistency with applicable regional planning documents related to air quality and GHG reduction. The project is included in 2024 Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) and the 2025 Federal Transportation Improvement Program (FTIP), both of which are conforming to State and Federal ambient air quality standards provided in the Air Quality Management Plan (AQMP). In addition, PF-AQ-1 requires the contractor to comply with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances. Therefore, the project would not conflict with the AQMP or violate any air quality standards and have no impact. No mitigation is required.

2.4.8.2 Avoidance, Minimization and/or Mitigation Measures

In addition to minimization measure GHG-1, PF-AQ-1 will be implemented as part of the project to minimize GHG emissions. No mitigation is required.

GHG-1: The following emissions reduction strategies should be implemented during construction:

- Reduction of construction waste
- Energy efficient construction methodologies
- Fuel efficient measures for equipment and traffic management
- Local materials to be used where feasible/available to reduce GHG emissions
- Reduced frequency of vehicle idle times

2.4.9 Hazards and Hazardous Materials

Would the project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less Than Significant Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical 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
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.4.9.1 CEQA Significance Determinations for Hazards and Hazardous Materials

The potential for the Build Alternative to result in significant impacts related to Hazards and Hazardous Materials is assessed in the following discussion and is based on the Initial Site Assessment (ISA) Checklist (November 2025).

a) **Less Than Significant Impact**: Although the project will require the transportation and/or disposal of the hazardous materials, the Contractor will be required to comply with Caltrans Standards and Special Provisions for Hazardous Waste Management and thus would not create a significant hazard to the public or the environment through the routine transport of disposal of hazardous materials.

An Aerially Deposited Lead (ADL) investigation will be required (PF-HZ-1) as the project involves excavation for upgrades to traffic safety devices, AC dikes, culvert repairs, new inlets, and curb ramp upgrades along SR-241 and SR-133. The impacts will be less than significant and no mitigation is required.

Existing yellow traffic striping is not considered hazardous waste, as the yellow pigment was removed from materials prior to installation in the project area (striping replaced between 2008–2014). Standard Specifications for removal of non-hazardous paint and striping will apply (PF-HZ-4). The impacts will be less than significant and no mitigation is required.

In addition, the removal of existing wood posts treated with chemical preservatives will generate treated wood waste (TWW). Management and disposal of TWW must comply with the California Department of Toxic Substances Control (DTSC) regulations; specific contract specifications will be provided during the design phase (PF-HZ-2).

b) **Less Than Significant Impact**: The ISA Checklist identified no significant contamination within the project site, and nearby open sites do not pose risk to the project. Construction monitoring and unknown-hazard procedures (PF-HAZ-3) will ensure appropriate response if unexpected contamination is encountered. Therefore, impacts will be less than significant and would not create a significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials.

c) **Less Than Significant Impact**: The ISA Checklist identified no significant onsite or adjacent contamination within the project limits. Construction activities would involve only the temporary use of standard construction materials, all of which would be managed in compliance with Caltrans Hazardous Waste and Contamination protocols, the Construction Manual, and applicable standards. Based on the absence of contamination and the proper management of construction-phase materials, the project would not create a significant hazard to the public or the environment involving the release of hazardous materials into the environment. Although Melinda Heights Elementary School is located near the project area, no hazardous emissions affecting the school are anticipated. Therefore, no mitigation is required.

d) **No Impact**: The project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the project would not create any significant hazard to the public or environment. No mitigation is required.

e) **No Impact**: The project is not located within an airport land use plan, nor within two miles of a public airport. Therefore, no airport-related safety hazards or excessive noise impacts would occur. No mitigation is required.

f) **Less Than Significant Impact**: The project will maintain emergency access throughout construction and will implement a Traffic Management Plan (PF-TRA-1) to ensure efficient vehicle movement. With adherence to the TMP, the project will not interfere with adopted emergency response or evacuation plans. Less than significant impacts are anticipated to occur with no mitigation required.

g) **No Impact**: Although the project is in a very high fire hazard severity zone, compliance with Caltrans Fire Protection standards ensures the project would not indirectly or directly increase risk to people or structures. No mitigation is required.

2.4.9.2 Avoidance, Minimization, and/or Mitigation Measures

In addition to PF-TRA-1 the following project features will be implemented:

PF-HAZ-1 The project involves excavation during repair or replacement of guardrail and improvement of drainage facilities. Aerially Deposited Lead (ADL) investigation is required at the soil disturbance area. ADL investigation will be completed during PS&E phase. The investigation will be conducted during PS&E phase. Design Branch is required to submit an ADL investigation request with a plan highlighting the soil disturbance areas and details of excavation including depth and length of the excavation. Based on the findings of the investigation, Standard Special Provisions (SSP) for the removal of ADL contaminated soil will be provided. During the construction, the appropriate SSP will be implemented.

PF-HAZ-2 The proposed project includes removal of existing wood posts for Metal Guardrail System (MGS) supports and signposts, which contain chemical preservatives. The wood posts are considered treated wood waste (TWW). For the management and disposal of TWW, the contract must follow the DTSC regulation. Specification for the management of TWW will be provided in the PS&E phase. During construction, the appropriate SSP will be implemented.

PF-HAZ-3 During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the California Department of Transportation (Caltrans) Construction Manual and 14-11.02 of the Department Standard Specification (2025).

PF-HAZ-4 Traffic striping/markings, and other colors of paint contains lead at the concentration less than hazardous level of concentration. SSP for non-hazardous paint will be provided in the PS&E phase of the project. Contractor will follow the appropriate SSP for the removal of the traffic striping/markings and other paints.

2.4.10 Hydrology and Water Quality

Would the project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact
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;	Less Than Significant Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	Less Than Significant Impact
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Less Than Significant Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

2.4.10.1 CEQA Significance Determinations for Hydrology and Water Quality

The proposed project is located on State Route 133 and State Route 241 and within Santa Ana and San Diego Regional Water Quality Control Boards. The project is within the Lower Santa Ana River Hydrological Area (801.11) and lies within the San Diego Creek and Santiago Creek Watersheds. Water bodies within the project limits include Canada Chiquita creek, Tijeras Canyon Creek, Arroyo Trabuco Creek, Oso Creek, Aliso Creek, Serrano Creek, Borrego Creek, Agua Chinon Wash, and Bee Canyon Wash. Other water bodies within the project limits include Santiago Creek and the Santa Ana River. The potential for the project to result in significant impacts was based on the Water Quality Technical Memorandum (March 2026).

a) **Less Than Significant Impact:**

Construction

The proposed project is a multi-asset project with the core objective is pavement preservation. The project will cold plane existing pavement and replace it with Open Graded Friction Course (OGFC) and rubberized hot mix asphalt, and RHMA-G on the mainline lanes, shoulders and ramps. The remaining assets of the project include drainage system restoration, lighting rehabilitation, roadside rehabilitation and protective betterments such as highway planting and irrigation systems, signage, upgrade census stations, and upgrade curb ramps to current ADA standards. The proposed project is anticipated to have a Disturbed Soil Area (DSA) of 3.75 acres.

Anticipated potential temporary impacts to water quality include possible sediment transport caused by disturbed soil areas created by construction activities such as clearing, grubbing and excavation and/or grading to construct lighting, highway planting/irrigation as well as modifications to drainage facilities. The project can also have temporary water quality impacts from minor concrete waste, trash from workers and construction waste, petroleum products from construction equipment and/or vehicles, sanitary waste from portable toilets, and any other chemicals used for construction such as coolants used for equipment and/or concrete curing compounds.

The project will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) and determine a Risk Level based on potential erosion and transport to receiving waters. The SWPPP will identify temporary Best Management Practices (BMPs) to address the potential temporary impacts to water quality. The BMPs identified in the project SWPPP will include measures such as temporary soil stabilization measures, linear sediment barriers (i.e. silt fence, gravel bag berms, fiber rolls), and construction site waste management (i.e. concrete washout, construction materials storage, litter/ waste management). The project features (PF-WQ-2, and PF-WQ-3) would address any temporary impacts to water quality.

Operation

The proposed project is conducting pavement rehabilitation as the core asset and the satellite assets will have minor impacts to water quality. There will be no new or replaced impervious surface that would require post construction treatment Best Management Practices (BMP) per the Caltrans NPDES permit. Long term impacts to water quality would be addressed for areas of Disturbed Soil Area (DSA) created by the project. Design Pollution Prevention BMPs (source control BMPs) will be implemented such as permanent soil stabilization measures (landscaping) to prevent the discharge of soil and sediments upon completion of construction as well as velocity dissipation devices for the drainage improvements. Since the project does not require post construction treatment BMPs, the project will address long term

impacts to water quality with the implementation of post construction Design Pollution Prevention BMPs.

Project feature PF-WQ-4 would address any permanent impacts to water quality.

b) **No Impact**: It is not anticipated that the project will encounter groundwater during construction.

c)

(i) Less than Significant Impact: The project will not result in substantial erosion or siltation on or off-site. Any erosion and siltation that can occur during construction will be from Disturbed Soil Areas (DSA) created by the project's excavation/grading. The potential erosion/siltation will be addressed by the installation and implementation of temporary Best Management Practices (BMPs) identified in the project's SWPPP (PF-WQ-3). Post-construction erosion/siltation is addressed by the installation of permanent soil stabilization BMPs (PF-WQ-4).

(ii) Less than Significant Impact: The project will not substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite. The project does not increase the impervious surface.

(iii) Less than Significant Impact: The proposed project will not exceed the capacity of the existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. As indicated previously, the project may contribute additional sources of pollutants during construction. Potential temporary impacts to water quality during construction include sediments from grading and excavation operations, trash from workers and construction waste, petroleum products from construction equipment and/or vehicles, concrete waste, sanitary wastes from portable toilets and any other chemicals used for construction such as coolants used for equipment and/or concrete curing compounds.

The project may contribute additional sources of pollutants upon completion of construction. Pollutants typically generated during the operation of a transportation facility include sediment/turbidity, nutrients, trash and debris, bacteria and viruses, oxygen demanding substances, organic compounds, oil and grease, pesticides, and metals. The project will incorporate Design Pollution Prevention (source control) BMPs as required by the Department NPDES permit to ensure that adequate measures are included to minimize any potential long-term impacts.

With the implementation of a SWPPP and selected temporary BMPs during construction (WQ-PF-3), as well as evaluating and implementing post construction BMPs (WQ-PF-4), the project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide additional sources of polluted runoff.

With the implementation of the Department NPDES Permit, the Construction General Permit, a Storm Water Pollution Prevention Plan (SWPPP) and temporary

and permanent BMPs, the project will not substantially degrade water quality (PF-WQ1, PF-WQ-2, PF-WQ-3, PF-WQ-4).

(iv) No Impact: The project is not within the 100-year floodplain zone; and will not impede or redirect flood flows.

d) **No Impact:** The project is not in a flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

e) **No Impact**: The project will not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The project will comply with the Department Statewide NPDES Storm Water Permit (PF-WQ-1) and the Statewide Construction General Permit for temporary impacts to water quality (PF-WQ-2).

2.4.10.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the following project features will be implemented as part of the project:

PF-WQ-1 The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2022-0033-DWQ, NPDES No. CAS000003 and the and any subsequent permits in effect at the time of construction

PF-WQ-2 The project will comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2022-0057-DWQ, NPDES No. CAS000002 and any subsequent permits in effect at the time of construction.

PF-WQ-3 The project will comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have potential impact on water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs

PF-WQ-4 Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.

2.4.11 Land Use and Planning

Would the project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

2.4.11.1 CEQA Significance Determinations for Land Use and Planning

a) **No Impact**: Existing land uses in the vicinity of the project study area include a mix of residential, commercial, industrial, agriculture, open space, and recreational land uses; however, the project limits are within the existing freeway and the Caltrans ROW. With the implementation of PF-TRA-1 any construction impact to surrounding areas would be minimized. No mitigation is required.

b) **No Impact**: The project involves pavement rehabilitation and safety upgrades within existing highway right-of-way. It does not change land use or conflict with any applicable plans or policies. No significant land use impacts will occur and no mitigation is required.

2.4.11.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the project feature PF-TRA-1 will be implemented as part of the project.

2.4.12 Mineral Resources

Would the project:

Question	CEQA Determination
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

2.4.12.1 CEQA Significance Determinations for Mineral Resources

a) No Impact: The Santa Rosa Lead-Zinc site is identified in the USGS Mineral Resources Data System[6] as a historical lead-zinc occurrence with a Grade D classification, indicating very low resource quality and limited economic significance. There is no evidence of current production or plans for future extraction. The deposit is located until the existing roadway, and the project proposes to install rumble strips and upgrade a census station in the vicinity of the site, which would not result in any ground disturbance. Therefore, the project would not result in the loss of availability of a mineral resource of value to the region or the residents of the State. No mitigation is required.

b) No Impact: The Santa Rosa Lead-Zinc site is not designated as a locally important mineral resource recovery area in the 2013 County of Orange General Plan, Figure VI-3 in the Resources Element [7] map. It does not appear in any local land use plans as an active or planned resource zone. The deposit is located until the existing roadway, and the project proposes to install rumble strips and upgrade a census station in the vicinity of the site, which would not result in any ground disturbance. Consequently, the project would not affect the availability of a locally important mineral resource recovery site. No mitigation is required.

2.4.12.2 Avoidance, Minimization, and/or Mitigation Measures

None required.

2.4.13 Noise

Would the project result in:

[6] U.S. Geological Survey. 2011. Mineral Resources Data System. Website: https://mrdata.usgs.gov/mrds/ (accessed January 29, 2026).

[7] County of Orange General Plan. 2013. Chapter VI. Resources Element. Website: https://ocds.ocpublicworks.com/sites/ocpwocds/files/import/data/files/40235.pdf (accessed January 29, 2026)

Question	CEQA Determination
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two nautical miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Less Than Significant Impact

2.4.13.1 CEQA Significance Determinations for Noise

a) **Less Than Significant Impact**: The proposed project does not increase capacity thus, a traffic noise study and abatement evaluation are not required. Short-term construction related noise impacts will occur during construction of the project. However, the Department will control construction noise through standard specifications Section 14-8.02 (2025) as outlined in Project Feature PF-N-1. Therefore, temporary noise impacts are considered less than significant.

b) **No Impact**: The proposed project will not generate excessive groundborne vibration or groundborne noise levels. See response (a) above.

c) **Less Than Significant Impact**: The project is located within the vicinity of Lyon Heliport (4CL1), a private airstrip less than two miles from the proposed project. No other airport or airport land use plan is located within two miles of the project area, and the proposed project will not expose people residing or working in the project area to excessive noise levels. See response (a) above.

2.4.13.2 Avoidance, Minimization and/or Mitigation Measures

Although no mitigation will be required for the project, the following project feature will be implemented as part of the project:

PF-N-1 **Noise Control:** Contractor must comply with the Department's Standard Specification 14-8.02, "Noise Control" (2025) during construction. The specification states following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA L_{max} at 50 feet from the job site from 9 p.m. to 6 a.m.

2.4.14 Population and Housing

Would the project:

Question	CEQA Determination
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

2.4.14.1 CEQA Significance Determinations for Population and Housing

a) **No Impact**: The proposed project is not a capacity increasing project and proposes permanent pavement, drainage, lighting, rehabilitation, safety improvements, and complete street upgrades. Thus, the project would not induce substantial unplanned population growth directly or indirectly. No mitigation required.

b) **No Impact**: See (a) the project will not displace substantial numbers of existing people or housing and will not necessitate the construction of replacement housing elsewhere.

2.4.14.2 Avoidance, Minimization, and/or Mitigation Measures

None required.

2.4.15 Public Services

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:

Question	CEQA Determination
a) Fire protection?	Less Than Significant Impact
b) Police protection?	Less Than Significant Impact
c) Schools?	Less Than Significant Impact
d) Parks?	Less Than Significant Impact
e) Other public facilities?	Less Than Significant Impact

2.4.15.1 CEQA Significance Determinations for Public Services

a) **Fire Protection – Less Than Significant Impact:** Orange County Fire Authority (OCFA) provides fire protection and emergency response services for the project study area. The proposed project will not permanently impact acceptable service ratios, response times or other performance objectives for fire protection. Due to the nature of construction activities, certain lanes of the highway facility may be temporarily closed for construction. Thus, fire protection services may be temporarily impacted. However, with the implementation of PF-TRA-1; construction activity-related delays would be minimized by the effective application of traditional traffic handling practices. As part of the PF-TRA-1 TMP, the Department District 12 Orange County office would coordinate with emergency response providers to ensure the project does not interfere with emergency response times. Therefore, no mitigation is required.

b) **Police Protection – Less Than Significant Impact:** The Orange County Sheriff's Department provides police protection for the project study area. The proposed project will not permanently impact acceptable service ratios, response times or other performance objectives for police protection. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, police protection services may be temporarily impacted. However, PF-TRA-1 will be implemented to minimize construction activity-related delays by the effective application of traditional traffic handling practices. As part of the TMP, the Caltrans District 12 Orange County office would coordinate with emergency response providers to ensure the project does not interfere with emergency response times. Therefore, no mitigation is required.

c) **Schools – Less Than Significant Impact:** The proposed project will not permanently impact accessibility to schools within the vicinity of the project limits. Loma Ridge Elementary, Melinda Heights Elementary, Tijeras Creek Elementary, and Tesoro High School are located within the vicinity of the project. Due to the

nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, accessibility may be temporarily impacted. However, PF-TRA-1 will be implemented to minimize construction activity-related delays by the effective application of traditional traffic handling practices. Therefore, no mitigation is required.

d) **Parks – Less Than Significant Impact:** The proposed project is within the vicinity of O'Neill Regional Park, Thomas F. Riley Wilderness Park, Whiting Ranch Wilderness Park, Lake Forest Sports Park, Etnies Skatepark, Portola Springs Community Park, Baker Ranch Community Park, and Limestone Canyon Regional Park. However, the parks will not be impacted. Due to the nature of construction activities certain lanes of the highway facility may be temporarily closed for construction. Thus, accessibility may be temporarily impacted. However, PF-TRA-1 will be implemented to minimize construction activity-related delays by the effective application of traditional traffic handling practices. Therefore, no mitigation is required.

e) **Other Public Facilities – No Impact:** There are no other public facilities in the project area. Therefore, no other public facilities will be impacted. No mitigation is required.

2.4.15.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, project feature PF-TRA-1 will be implemented as part of the project.

2.4.16 Recreation

Question	CEQA Determination
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
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

2.4.16.1 CEQA Significance Determinations for Recreation

a) **No Impact**: The project is a pavement preservation and safety improvement project within the existing Caltrans right of way. The project would not increase the use of existing neighborhood and regional parks or other recreational facilities. Therefore, there will be no impact.

b) **No Impact**: The project does not include the construction or expansion of recreational facilities. All improvements would occur within the Caltrans right of way. Therefore, there will be no impact.

2.4.16.2 Avoidance, Minimization, and/or Mitigation Measures

None required.

2.4.17 Transportation

Would the project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact
c) 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
d) Result in inadequate emergency access?	Less Than Significant Impact

2.4.17.1 CEQA Significance Determinations for Transportation

a) **No Impact**: The project involves maintenance and safety improvements that do not alter roadway capacity or circulation patterns and are consistent with local jurisdictional transportation goals emphasizing safe, efficient, multimodal networks (Irvine General Plan – Circulation[8]; Lake Forest Master Plan of Arterial Highways[9]; Mission Viejo Goal 1 standards[10]; Rancho Santa Margarita Goals 1–3[11]; and Orange County Goals 1–3[12] for coordinated arterial systems). Therefore, there will be no impact.

b) **No Impact**: Under CEQA Guidelines 15064.3, transportation impacts are evaluated based on vehicle miles traveled, and projects that do not increase VMT are generally presumed to result in a less-than-significant impact. The project does not add capacity, change connectivity, or induce additional travel and therefore does not affect VMT. Safety, rehabilitation, and replacement activities are not VMT generating actions and align with VMT policy frameworks

[8] City of Irvine. 2025. General Plan – Transportation Element (Section 4.13 Transportation). https://cityofirvine.org/community-development/current-general-plan (accessed March 12, 2026).
[9] City of Lake Forest. 2025. Lake Forest 2040 General Plan – Mobility Element. https://www.lakeforestca.gov/departments/community_development/planning/plans_and_standard_guidelines.php#undefined (accessed March 12, 2026).
[10] City of Mission Viejo. 2013. General Plan Circulation Element. https://www.cityofmissionviejo.org/departments/community-development/planning/general-plan (accessed March 12, 2026).
[11] City of Rancho Santa Margarita. 2025. General Plan Circulation Element (Adopted July 9, 2025). https://www.cityofrsm.org/527/General-Plan-2020 (accessed March 12, 2026).
[12] County of Orange. 2025. Orange County General Plan – Chapter IV Transportation Element. https://ocds.ocpublicworks.com/service-areas/oc-development-services/planning-development/codes-and-regulations/general-plan (accessed March 12, 2026).

in the projects jurisdictions. As a result, the project would not conflict with CEQA Guidelines 15064.3(b) and there will be no impact.

c) **No Impact**: The project does not introduce new geometric features or incompatible uses and instead upgrades existing conditions to current safety standards, including traffic safety devices, signage, and ADA elements. Local transportation elements emphasize adherence to established design standards and safe multimodal operations. The project improves safety rather than introducing potential hazards, therefore no impact would occur.

d) **Less Than Significant Impact**: The project will not result in inadequate emergency access. A Transportation Management Plan (TMP) will ensure that emergency vehicles can pass through the work area throughout construction, and temporary traffic control will maintain travel in both directions. Circulation elements in all affected jurisdictions emphasize ensuring safe and reliable emergency access and with these procedures in place, emergency access would remain adequate. Therefore, impacts will be less than significant.

2.4.17.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the following project feature will be implemented as part of the project:

PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by the Department. Adequate local emergency access shall be provided at all times to adjacent uses. Proper detours and warning signs should be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

2.4.18 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:

Question	CEQA Determination
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	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No Impact

2.4.18.1 CEQA Significance Determinations for Tribal Cultural Resources

The potential for the project to result in significant impacts related to tribal cultural resources was assessed as part of the preparation of the Historic Property Survey Report (HPSR; March 2026).

a) **No Impact**: A review of the project Area of Potential Effects (APE) conducted for the HPSR confirms that no tribal cultural resources, as defined under Public Resources Code Section 21074, would be affected by the proposed project. A comprehensive records search was completed through the Caltrans Cultural Resources Database (CCRD), the South Central Coastal Information Center, historic aerials, and previous project reports, covering a ½-mile radius around the project limits. This review identified 25 recorded resources in the surrounding area; however, only four previously documented prehistoric lithic scatter sites were mapped within the APE. Field verification carried out by Caltrans District 12 Professionally Qualified Staff (PQS) Archaeologist Judy Bernal and staff showed that these sites have been highly disturbed, destroyed, or paved over by past construction of SR-241, SR-133, Bee Canyon Road, and agricultural activities, with no intact cultural materials observed during surveys. Additionally, all proposed project activities are confined to shallow surface and subsurface work within the existing roadway and will not disturb native soils or extend into areas where any tribal cultural resources may be present. As a result, no tribal cultural resources listed or eligible for listing in the California Register, or in a local register, occur within the project area, and the project will not cause a substantial

adverse change to such resources. No impact would occur, and no mitigation is required.

b) **No Impact**: Although the records search identified culturally sensitive areas within a ½-mile radius, field surveys were negative for cultural materials, and the known sites mapped within the APE have been previously destroyed or are located outside the limits of any proposed ground disturbance. The APE consists entirely of existing roadway surfaces, disturbed soils, and paved rights-of-way, with no extension into undisturbed areas that could contain intact tribal cultural resources. Thus, the project would not affect any resource that may be considered significant to a California Native American tribe under Public Resources Code Section 5024.1(c), and no such resources were identified within the APE. No impact would occur, and no mitigation is required

Native American consultation per Assembly Bill 52 was conducted for this project. The Native American Heritage Commission (NAHC) was contacted on October 30, 2024 with a request to conduct a Sacred Lands File (SLF) search and provide a Native American Tribal Consultation List for the Project site. The NAHC responded on November 19, 2024, stating that an SLF search was completed for the APE with positive results. The NAHC also recommended that 26 Native American individuals representing the Cahuilla, Gabrielino, Juaneño, Cupeño, and Luiseño groups be contacted for information regarding cultural resources that could be affected by the proposed project. All 26 individuals were contacted on March 26, 2026.

Two responses were received as a result of the initial project notification letters. These responses were from the Gabrieleno Band of Mission Indians – Kizh Nation and the Santa Rosa Band of Cahuilla Indians

Gabrieleno Band of Mission Indians – Kizh Nation

On March 24, 2026, Ms. Salas of the Gabrieleno Band of Mission Indians – Kizh Nation requested a consultation meeting. The meeting was scheduled for April 9th, 2026; but was cancelled by the Kizh Nation. Subsequent consultation was conducted via email from March 26, 2026 to April 30, 2026. The tribe provided letters stating their policies and mitigation request including 3 separate maps outlining historic land parcels, roads and tribal villages, however no specific areas of concerns within the direct APE were outlined during this time; thus, no tribal mitigation was accepted as a result of these conversations. Consultation for the cultural study comment period is complete at this time. Consultation for the next planning phases continues until the end of the project's lifespan.

Santa Rosa Band of Cahuilla Indians

On March 30, 2026, Ms. Minott of the Santa Rosa Band of Cahuilla Indians responded via email that “[The tribe doesn’t] have any comments regarding this project.” Consultation is complete at this time.

2.4.18.2 Avoidance, Minimization, and/or Mitigation Measures

None required.

2.4.19 Utilities and Service Systems

Would the project:

Question	CEQA Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
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?	No Impact
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?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

2.4.19.1 CEQA Significance Determinations for Utilities and Service Systems

a) **No Impact**: The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. The project will replace existing drainages which have lost serviceability due to age, wear or degradation. The addition of new inlets are to address water ponding issues at various curb ramps. None of these drainages are added as a result induced population growth. Hence, there is no impact, and no mitigation required.

b) **No Impact**: The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years. No mitigation is required.

c) **No Impact**: The project would not 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 mitigation is required.

d) **No Impact**: The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. No mitigation is required.

e) **No Impact**: The project construction crew would be responsible for controlling and disposing of solid waste in accordance with federal, state and local statutes and regulations. No mitigation is required.

2.4.19.2 Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
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?	No Impact
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?	No Impact
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?	No Impact

2.4.20.1 CEQA Significance Determinations for Wildfire

Senate Bill 1241 directed the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to revise the CEQA Checklist to include specific questions addressing wildfire hazards for projects located within State-designated Very High Fire Hazard Severity Zones.

Based on CAL FIRE's hazard mapping for the project study area, portions of the corridor fall within a Very High Fire Hazard Severity Zone due to the presence of dense, highly combustible vegetation, limited access to certain fire-prone areas, and constrained water availability for fire suppression. These mapped conditions indicate an elevated potential for rapid fire spread and increased difficulty for emergency response.

Fire protection and emergency response services within the project area are provided by the Orange County Fire Authority (OCFA). The proposed project would not result in permanent impacts to OCFA service ratios, response times, or other fire-protection performance standards. However, construction activities may require temporary lane closures, which could briefly affect emergency access and response times. The potential for the Preferred Alternative to result in significant wildfire-related impacts is evaluated in the following analysis.

a) **No Impact**: According to the CALFIRE Fire Hazard Severity Zone Viewer, the proposed project is located within a Very High Fire Hazard Severity Zone. Access through the project area will be maintained throughout construction,

ensuring that adopted emergency response and evacuation plans are not impeded. Therefore, no impacts are anticipated, and no mitigation is required.

b) **No Impact**: Seasonal Santa Ana wind conditions can create hot, dry weather that increases regional wildfire potential. However, the proposed project consists of pavement preservation, drainage system restoration, lighting rehabilitation, roadside rehabilitation, safety and mobility improvements, and complete streets upgrades. These improvements do not introduce new land uses, habitable structures, or long-term activities that would increase wildfire risk or expose workers or the public to pollutant concentrations from wildfire events. Construction activities are temporary and limited to the existing transportation corridor. Therefore, the project would not exacerbate wildfire risk or expose people to wildfire-related hazards. No impacts would occur, and no mitigation is required.

c) **No Impact:** The project includes multi-asset improvements such as pavement preservation, culvert rehabilitation, lighting upgrades, roadside improvements, and complete streets features. None of these improvements involve constructing infrastructure such as new roads, fuel breaks, power lines, or emergency water supply systems, that could exacerbate wildfire risk. All work is confined to the existing transportation corridor and involves upgrades to existing systems. Therefore, no impacts would occur, and no mitigation is required.

d) **No Impact**: The project does not include activities that would alter slope stability, modify drainage patterns in a manner that increases risk, or create conditions that would expose people or structures to post-fire geohazards. Drainage system restoration included in the project would improve existing culvert functionality and stormwater conveyance, reducing, not increasing, hazard potential. In addition, Project Features PF-WQ-1 and PF-WQ-4 will be implemented to ensure proper stormwater discharge management. Therefore, no impacts would occur, and no mitigation is required.

2.4.20.2 Avoidance, Minimization, and/or Mitigation Measures

Although no mitigation will be required for the project, the project features In addition to PF-TRA-1, PF-WQ-1 and PF-WQ-4 will be implemented as part of the project.

2.4.21 Mandatory Findings of Significance

Question	CEQA Determination
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant with Mitigation Incorporated
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
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

The California Environmental Quality Act (CEQA) requires the analysis of a project's mandatory findings of significance. The analysis of the mandatory findings of significance of the project is based on the findings of the project's impacts on all the required issue areas.

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 posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to 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 types of 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, and 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.

California Environmental Quality Act (CEQA) Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for

an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines.

2.4.21.1 CEQA Significance Determinations for Mandatory Findings of Significance

a) **Less Than Significant Impact with Mitigation Incorporated**: There were 8 special status plant species and 15 listed animal species (FESA/CESA) that were identified with potential to occur within the Biological Study Area (BSA). Several of these species may be found or may have suitable habitat within the BSA, but are not found within or adjacent to project impact areas. Suitable habitat for the Coastal California Gnatcatcher, Western Spadefoot Toad, and Migratory birds can be found within the BSA, but no significant impacts are expected for these species (Section 2.4.4). PF-BIO-1 through PF-BIO-7 are project features that will be implemented as part of the project to avoid impacts to migratory bird species.

   The project does have the potential to impact geologic units with high paleontological sensitivity (Section 2.4.7). Additionally, the presence of paleontological collection localities within the immediate and 1-mile vicinity of the Project Area suggest the potential for construction of the proposed Project to result in impacts to paleontological resources. Project Feature **PF-PAL-1** addresses the possibility of discovery of paleontological resources during construction. Measures **PAL-1** and **PAL-2** will require the preparation and implementation of a Paleontological Mitigation Plan (PMP) and a Mandatory Paleontological Awareness Training, respectively. With the implementation of these measures, potentially significant impacts to paleontological resources would be reduced to a less than significant level.

b) **Less Than Significant Impact:** Although the project may have impacts that are individually limited, these impacts will not be cumulatively considerable, and impacts will be less than significant. There are currently no capacity increasing or operational improvement projects currently in construction in this portion SR-133. There are a few scattered drainage system maintenance and safety improvement projects near or around the project location and vicinity. However, these project work activities are for maintenance purposes are minimal in scale, impact and duration of construction would be temporary and short in nature; thus having a less than significant impact relative to projects of the past, present in future in the project area.

c) **No Impact**: The purpose of this project is to rehabilitate pavement, restore drainage systems, and increase safety of the roadway. Thus, this project will not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. Refer to the discussion in the other sections for additional information that supports this finding.

2.4.21.2 Avoidance, Minimization, and/or Mitigation Measures

With the implementation of the project feature and avoidance, minimization and/or mitigation measures as stated in the previous sections (PF-BIO-1 through PF-BIO-7, PF-PAL-1, PAL-1, PAL-2), impacts would be reduced to less than significant levels.

Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, and Project Development Team meetings. This chapter summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

3.1 Project Development Team (PDT) Meetings

During the preparation of the environmental document for the proposed project, focused PDT meetings were held to discuss the proposed project design, factors to be considered during the environmental study process, key issues, and project schedule.

3.2 Tribal Cultural Resources

As part of the cultural investigation, a record search was conducted in September 2025 using Caltrans' Cultural Resource Database (CCRD). The Native American Heritage Commission (NAHC) was contacted to conduct a Sacred Lands File (SLF) search and to request a California Environmental Quality Act Tribal Consultation List under AB 52. A total of 26 Native American individuals or groups were contacted on March 23, 2026, for cultural resource information regarding this project. Responses were received from the Gabrieleno Band of Mission Indians – Kizh Nation, and the Santa Rosa Band of Cahuilla Indians. Coordination was conducted with the Native American Heritage Commission (NAHC) on October 30th, 2024 and Sacred Lands File was received from the NAHC on November 19th, 2024. Outreach efforts to local historical societies was conducted on March 19, 2026 and included contact with the Irvine Historical Society, Irvine Ranch Conservancy and Orange County Historical Society.

3.3 Biological Resources

Species lists were obtained from the USFWS' IPaC Resource List, the CNPS Rare Plant Inventory, California Natural Diversity Database (CNDDB), and National Marine Fisheries Service (NMFS) on November 24, 2025. Species lists are included below:

California Natural Diversity Database for Quads Canada Gobernadora, El Toro, and Santiago Peak

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Canada Gobernadora (3311755) OR Santiago Peak (3311765) OR El Toro (3311766))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Allen's pentachaeta *Pentachaeta aurea ssp. allenii*	PDAST6X021	None	None	G4T1	S1	1B.1
American badger *Taxidea taxus*	AMAJF04010	None	None	G5	S3	SSC
American bumble bee *Bombus pensylvanicus*	IIHYM24260	None	None	G3G4	S2	
arroyo chub *Gila orcuttii*	AFCJB13120	None	None	G1	S2	SSC
arroyo toad *Anaxyrus californicus*	AAABB01230	Endangered	None	G1G2	S2	SSC
Braunton's milk-vetch *Astragalus brauntonii*	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
burrowing owl *Athene cunicularia*	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
California glossy snake *Arizona elegans occidentalis*	ARADB01017	None	None	G5T2	S2	SSC
California horned lark *Eremophila alpestris actia*	ABPAT02011	None	None	G5T4Q	S4	WL
California satintail *Imperata brevifolia*	PMPOA3D020	None	None	G3	S3	2B.1
Canyon Live Oak Ravine Forest *Canyon Live Oak Ravine Forest*	CTT61350CA	None	None	G3	S3.3	
chaparral nolina *Nolina cismontana*	PMAGA080E0	None	None	G3	S3	1B.2
chaparral ragwort *Senecio aphanactis*	PDAST8H060	None	None	G3	S2	1B.2
coast horned lizard *Phrynosoma blainvillii*	ARACF12100	None	None	G4	S4	SSC
coast patch-nosed snake *Salvadora hexalepis virgultea*	ARADB30033	None	None	G5T4	S3	SSC
Coast Range newt *Taricha torosa*	AAAAF02032	None	None	G4	S4	SSC
coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	ABPBG02095	None	None	G5T3Q	S2	SSC
coastal California gnatcatcher *Polioptila californica californica*	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
coastal whiptail *Aspidoscelis tigris stejnegeri*	ARACJ02143	None	None	G5T5	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Cooper's hawk *Astur cooperii*	ABNKC12040	None	None	G5	S4	WL
Coulter's saltbush *Atriplex coulteri*	PDCHE040E0	None	None	G3	S2	1B.2
Crotch's bumble bee *Bombus crotchii*	IIHYM24480	None	Candidate Endangered	G2	S2	
ferruginous hawk *Buteo regalis*	ABNKC19120	None	None	G4	S3S4	WL
golden eagle *Aquila chrysaetos*	ABNKC22010	None	None	G5	S3	FP
grasshopper sparrow *Ammodramus savannarum*	ABPBXA0020	None	None	G5	S3	SSC
Hall's monardella *Monardella macrantha ssp. hallii*	PDLAM180E1	None	None	G5T3	S3	1B.3
heart-leaved pitcher sage *Lepechinia cardiophylla*	PDLAM0V020	None	None	G3	S2S3	1B.2
intermediate mariposa-lily *Calochortus weedii var. intermedius*	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
intermediate monardella *Monardella hypoleuca ssp. intermedia*	PDLAM180A4	None	None	G4T2?	S2?	1B.3
least Bell's vireo *Vireo bellii pusillus*	ABPBW01114	Endangered	Endangered	G5T2	S3	
long-eared owl *Asio otus*	ABNSB13010	None	None	G5	S3?	SSC
many-stemmed dudleya *Dudleya multicaulis*	PDCRA040H0	None	None	G2	S2	1B.2
mesa horkelia *Horkelia cuneata var. puberula*	PDROS0W045	None	None	G4T1	S1	1B.1
mud nama *Nama stenocarpa*	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
northern harrier *Circus hudsonius*	ABNKC11011	None	None	G5	S3	SSC
northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	AMAFD05031	None	None	G5T3T4	S3S4	
orange-throated whiptail *Aspidoscelis hyperythra*	ARACJ02060	None	None	G5	S2S3	WL
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
red-diamond rattlesnake *Crotalus ruber*	ARADE02090	None	None	G4	S3	SSC
Riverside fairy shrimp *Streptocephalus woottoni*	ICBRA07010	Endangered	None	G1G2	S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Robinson's pepper-grass *Lepidium virginicum var. robinsonii*	PDBRA1M114	None	None	G5T3	S3	4.3
salt spring checkerbloom *Sidalcea neomexicana*	PDMAL110J0	None	None	G4	S2	2B.2
San Diego desert woodrat *Neotoma lepida intermedia*	AMAFF08041	None	None	G5T3T4	S3S4	SSC
San Diego fairy shrimp *Branchinecta sandiegonensis*	ICBRA03060	Endangered	None	G2	S1	
San Miguel savory *Clinopodium chandleri*	PDLAM08030	None	None	G2G3	S2	1B.2
Santa Ana speckled dace *Rhinichthys gabrielino*	AFCJB3705K	Proposed Threatened	None	G1	S1	SSC
Santiago Canyon dudleya *Dudleya chasmophyta*	PDCRA04150	None	None	G1	S1	1B.1
Santiago Peak phacelia *Phacelia keckii*	PDHYD0C4G1	None	None	G1	S1	1B.3
Southern California legless lizard *Anniella stebbinsi*	ARACC01060	None	None	G3	S3	SSC
southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	ABPBX91091	None	None	G5T3	S4	WL
Southern Coast Live Oak Riparian Forest *Southern Coast Live Oak Riparian Forest*	CTT61310CA	None	None	G4	S4	
Southern Cottonwood Willow Riparian Forest *Southern Cottonwood Willow Riparian Forest*	CTT61330CA	None	None	G3	S3.2	
southern grasshopper mouse *Onychomys torridus ramona*	AMAFF06022	None	None	G5T3	S3	SSC
Southern Mixed Riparian Forest *Southern Mixed Riparian Forest*	CTT61340CA	None	None	G2	S2.1	
Southern Riparian Scrub *Southern Riparian Scrub*	CTT63300CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland *Southern Sycamore Alder Riparian Woodland*	CTT62400CA	None	None	G4	S4	
southern tarplant *Centromadia parryi ssp. australis*	PDAST4R0P4	None	None	G3T2	S2	1B.1
southwestern pond turtle *Actinemys pallida*	ARAAD02032	Proposed Threatened	None	G2	SNR	SSC
southwestern willow flycatcher *Empidonax traillii extimus*	ABPAE33043	Endangered	Endangered	G5T2	S3	
steelhead - southern California DPS *Oncorhynchus mykiss irideus pop. 10*	AFCHA0209J	Endangered	Endangered	G5T1Q	S1	
sticky dudleya *Dudleya viscida*	PDCRA040T0	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
summer holly *Comarostaphylis diversifolia ssp. diversifolia*	PDERI0B011	None	None	G3T2	S2	1B.2
Tecate cypress *Hesperocyparis forbesii*	PGCUP040C0	None	None	G2	S2	1B.1
thread-leaved brodiaea *Brodiaea filifolia*	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC
two-striped gartersnake *Thamnophis hammondii*	ARADB36160	None	None	G4	S3S4	SSC
Valley Needlegrass Grassland *Valley Needlegrass Grassland*	CTT42110CA	None	None	G3	S3.1	
western mastiff bat *Eumops perotis californicus*	AMACD02011	None	None	G4G5T4	S3S4	SSC
western red bat *Lasiurus frantzii*	AMACC05080	None	None	G4	S3	SSC
western spadefoot *Spea hammondii*	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
white rabbit-tobacco *Pseudognaphalium leucocephalum*	PDAST440C0	None	None	G4	S2	2B.2
white-tailed kite *Elanus leucurus*	ABNKC06010	None	None	G5	S3S4	FP
yellow warbler *Setophaga petechia*	ABPBX03010	None	None	G5	S3	SSC
yellow-breasted chat *Icteria virens*	ABPBX24010	None	None	G5	S4	SSC
Yuma myotis *Myotis yumanensis*	AMACC01020	None	None	G5	S4	

Record Count: 75

Information for Planning and Consultation (US Fish and Wildlife Service) Species List

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Orange County, California



Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Reptiles

NAME	STATUS
Southwestern Pond Turtle *Actinemys pallida* Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4768	Proposed Threatened

NOT FOR CONSULTATION

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad Anaxyrus californicus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3762	Endangered
Western Spadefoot Spea hammondii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5425	Proposed Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp Streptocephalus woottoni Wherever found There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/8148	Endangered
San Diego Fairy Shrimp Branchinecta sandiegonensis Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6945	Endangered

Flowering Plants

NAME	STATUS
Nevin's Barberry Berberis nevinii Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8025	Endangered
Santa Monica Mountains Dudleyea Dudleya cymosa ssp. ovatifolia Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2538	Threatened
Thread-leaved Brodiaea Brodiaea filifolia Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
Coastal California Gnatcatcher Polioptila californica californica https://ecos.fws.gov/ecp/species/8178#crithab	Final
Riverside Fairy Shrimp Streptocephalus woottoni https://ecos.fws.gov/ecp/species/8148#crithab	Final

NOT FOR CONSULTATION

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

NOT FOR CONSULTATION

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

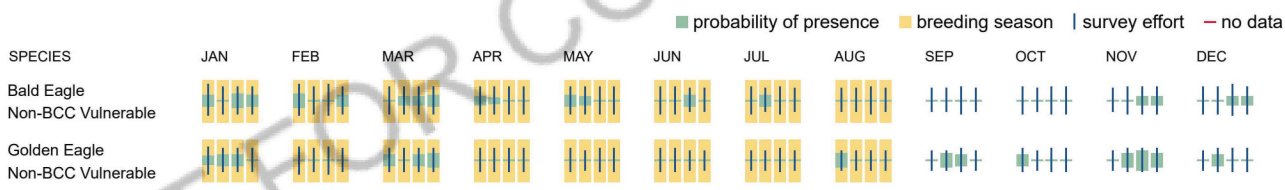
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION

Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15

NOT FOR CONSULTATION

Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15
Black-chinned Sparrow Spizella atrogularis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Gull Larus californicus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
Common Yellowthroat Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/2084	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31
Lawrence's Goldfinch Spinus lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20
Marbled Godwit Limosa fedoa This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9481	Breeds elsewhere
Northern Harrier Circus hudsonius This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8350	Breeds Apr 1 to Sep 15
Nuttall's Woodpecker Dryobates nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9410	Breeds Apr 1 to Jul 20

NOT FOR CONSULTATION

Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Santa Barbara Song Sparrow Melospiza melodia graminea This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/5513	Breeds Mar 1 to Sep 5
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3910	Breeds Mar 15 to Aug 10
Western Grebe Aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Western Gull Larus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 21 to Aug 25
Western Screech-owl Megascops kennicottii cardonensis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 1 to Jun 30
Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

NOT FOR CONSULTATION

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

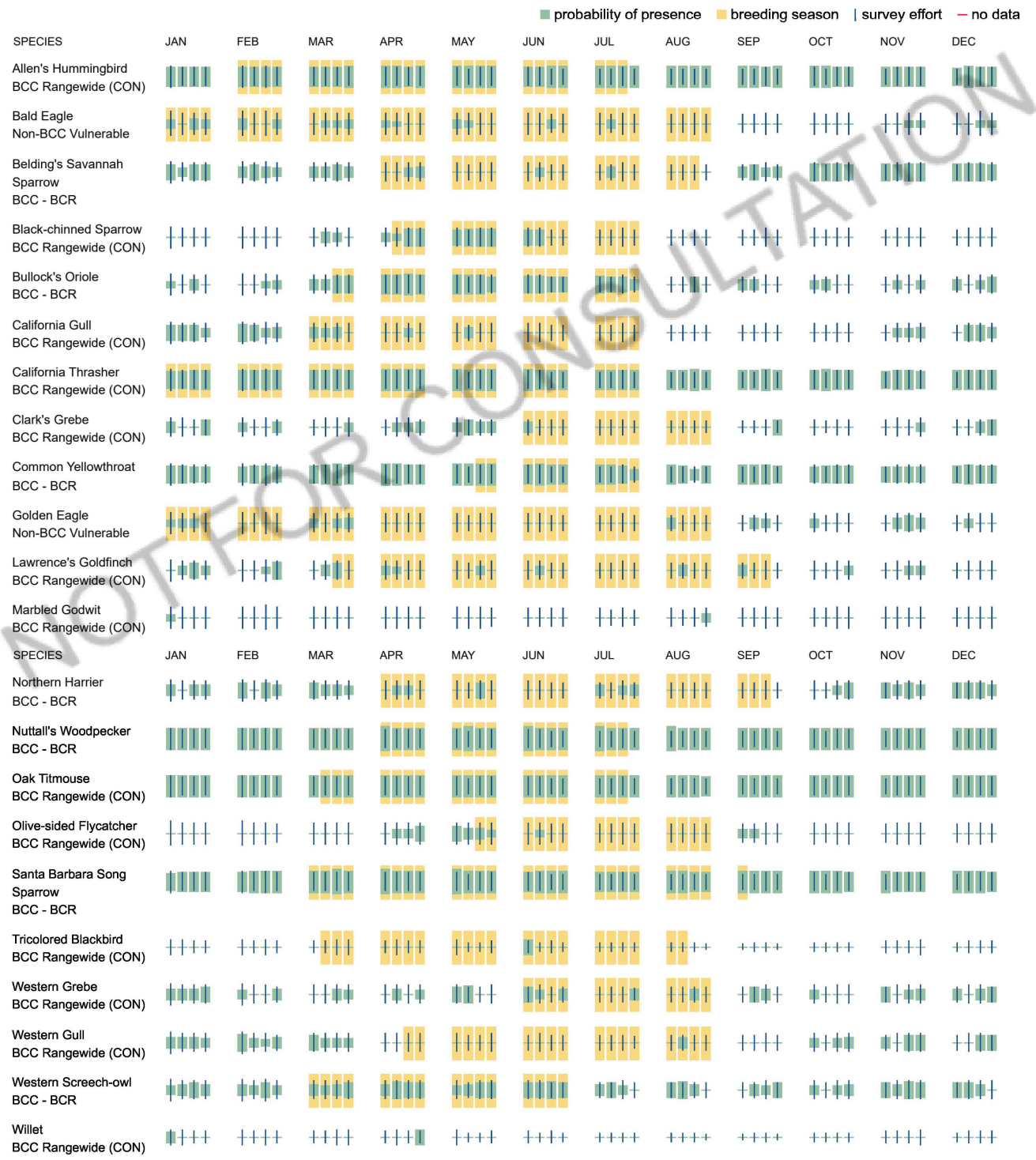
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



NOT FOR CONSULTATION

Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as "Vulnerable". See the FAQ "What are the levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

NOT FOR CONSULTATION

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

NOT FOR CONSULTATION

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

National Marine Fisheries Service Species List for Quads Anaheim, La Habra, Orange, and Yorba Linda

0T270 NMFS Species List

Accessed 11/24/2025

Quad Name **Canada Gobernadora**
Quad Number 33117-E5
ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - X
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -
ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -
ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -
ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -
ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -
ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -
ESA Pinnipeds

Guadalupe Fur Seal (T) -
Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -
MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name **Santiago Peak**
Quad Number 33117-F5
ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - X
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -
ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -
ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -
ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -
ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -
ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -
ESA Pinnipeds

Guadalupe Fur Seal (T) -
Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -
MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name **El Toro**
Quad Number 33117-F6
ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - X
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -
ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -
ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -
ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -
ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -
ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -
ESA Pinnipeds

Guadalupe Fur Seal (T) -
Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -
MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
MMPA Cetaceans -
MMPA Pinnipeds -

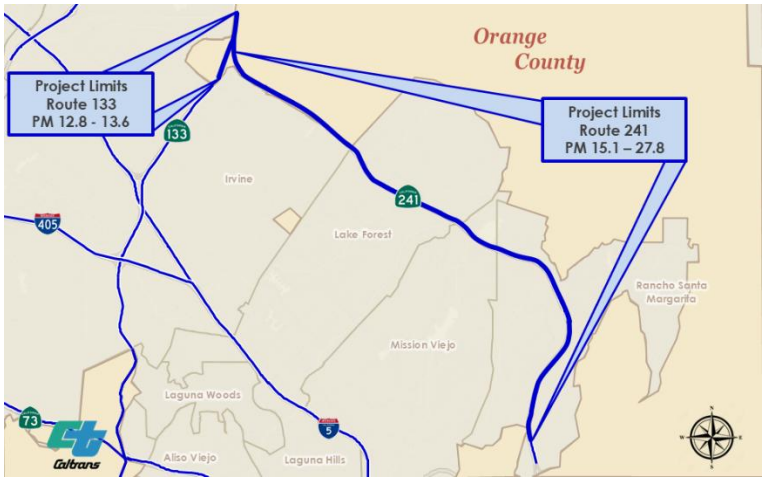
3.4 Public Participation

The Draft IS will be made available to the public and circulated to regional and local agencies to provide opportunity for their comments from May 20th to June 18th, 2026. The document will be available at the OC Library Foothill Ranch Branch (27002 Cabriole, Foothill Ranch, CA 92610), OC Library Rancho Santa Margarita Branch (30902 La Promesa, Rancho Santa Margarita, CA 92688), and at the California Department of Transportation - District 12 Office (1750 East 4th Street, Suite 100, Santa Ana, CA 92705). Caltrans will also advertise the availability of this IS in the newspapers of local circulation and an opportunity for a public hearing. In addition, a copy of the Notice of Availability will also be mailed out and is included below:

Public Notice

SR-241/SR-133 Multi-Asset Project

Notice of Availability of an Initial Study
Notice of Intent to Adopt a Mitigated Negative Declaration
(Study results available)



WHAT'S BEING PLANNED?

The California Department of Transportation (Caltrans) District 12 proposes a multi-asset improvement project to rehabilitate pavement, restore drainage systems, and enhance roadway safety and mobility along State Route 133 (SR-133) and State Route 241 (SR-241) in Orange County, California. The project improvements will extend from Post Mile (PM) 15.1 to PM 27.8 on SR-241 and PM 12.8 to PM 13.6 on SR-133 in the cities of Irvine, Lake Forest, Mission Viejo, Rancho Santa Margarita and Unincorporated County of Orange. Two alternatives are being considered: the Build Alternative and the No-Build Alternative. The Build Alternative includes pavement preservation through cold planing and replacement with open graded friction course and rubberized hot mix asphalt, drainage system restoration, lighting rehabilitation with LED upgrades, roadside rehabilitation, installation of rumble strips and curve warning signs, and complete street upgrades such as ADA-compliant curb ramps and pedestrian crosswalk restriping. The No-Build Alternative does not propose any major roadway rehabilitation and existing conditions would remain the same.

WHY THIS PUBLIC NOTICE?

Caltrans has studied the effects this project may have on the environment. Our studies show it will not significantly affect the quality of the environment. The report explains why it is called an Initial Study (IS). This notice is to tell you of the availability of the IS and Proposed Mitigated Negative Declaration (MND) and of its availability for you to read.

WHAT'S AVAILABLE?

The IS/Proposed MND are available for review at the Caltrans District 12 Office, 1750 East 4th Street, Suite 100, Santa Ana, CA 92705, on weekdays from 8:00 a.m. to 5:00 p.m. The documents are also available for review at the following locations during normal business hours:

- OC Library – Foothill Ranch Branch (27002 Cabriole, Foothill Ranch, CA 92610) (Hours: Mon - Thu: 10:00 am - 7:00 pm and Sat: 9:00 am - 5:00 pm)
- OC Library – Rancho Santa Margarita Branch (30902 La Promesa, Rancho Santa Margarita, CA 92688) (Hours: Mon - Thu: 10:00 am - 7:00 pm and Fri - Sat: 9:00 am - 5:00 pm)

In addition, the IS/Proposed MND and project information is also available online at: https://dot.ca.gov/caltrans-near-me/district-12/district-12-programs/district-12-environmental/sr-241-133-multi-asset-project

WHERE YOU COME IN

Do you have any comments about processing the project with a Proposed MND? Do you disagree with the findings of our study as set forth in the Proposed MND? Would you care to make any other comments on the project? Would you like a public meeting/hearing?

Public Comment Period: May 20, 2026 to June 18, 2026

Please submit your comments or request for a public hearing beginning on May 20, 2026 and no later than 5:00 pm, June 18, 2026 via email to: sr.241.133.multi.asset@dot.ca.gov, or in writing to: Sunny Saroa, Associate Environmental Planner, the Caltrans District 12, Division of Environmental Analysis, 1750 East 4th Street, Suite 100, Santa Ana, CA 92705. If there are no major comments, Caltrans will proceed with the project's design.

CONTACT

Individuals who require special accommodation (documentation in alternate formats, etc.) are requested to contact the District 12 Office of Public Affairs at (657) 328-6309. TDD users may contact the California Relay Service TDD line at 1-800-735-2929 or Voice Line at 1-800-735-2922. For more information about this study or any other transportation matter, contact the Office of Public Affairs at (657) 328-6309 or by email at D12PIO@dot.ca.gov.

Chapter 4 List of Preparers

The following Caltrans staff and consultants contributed to the preparation of this environmental document:

Nathan Abler, Public Information Officer. B.S. in Journalism, California Polytechnic State University, San Luis Obispo. 4 years of experience at Caltrans, 24 years of communications experience in the private sector. Contribution: Review of Public Notice and Distribution List.

Danielle Adili, Environmental Planner. B.A. in Environmental Science and Policy, and English. University of California, Irvine. 4 years of experience in environmental planning. Contribution: Preparation and of the environmental document.

Rabindra Bade, Environmental Engineer. Ph. D. Kumoh National Institute of Technology. 25 years of experience in research, design, consulting, and academics in the field of Environmental and Civil Engineering. Contribution: Preparation of Air Quality, Energy, Hazardous Waste, and Noise sections of the environmental document, preparer of the Environmental Engineering Technical Memorandum.

Barker, Kristopher, Engineering Geologist. B.S. in Earth Sciences. University of Southern California. 26 years of experience. Contribution: Preparation of the Geology and Soils section of the environmental document.

Judy Bernal, Associate Environmental Planner. Bernal, Judy, Associate Environmental Planner (Archaeologist). B.A. in Archeology/Anthropology, California State University, Long Beach, CA. M.S. Geological Science, Ohio University, Ohio. 12 years of experience. Contribution: Preparation of PIR/PER, HPSR, and cultural resources sections.

Ricardo Caraig, Transportation Engineer (Civil). B.S. in Civil Engineering, California State University at Fullerton. 25 years of experience in design and 9 years of experience in environmental engineering. Contribution: Senior review of the Environmental Engineering Technical Memorandum.

Caslavka, Matthew, Landscape Associate (Landscape Architect), B.S. Landscape Architecture California State Polytechnic University Pomona, CA. Licensed Landscape Architect (License # 5071), 45 years of experience. Contribution: Preparation of Visual Impact Analysis Questionnaire and Landscape Plans.

Arvin Cuevas, Senior Transportation Engineer (Civil). B.S. in Civil Engineering, California Polytechnic University at Pomona. 25 years of experience in civil engineering. Contribution: Senior review for Water Quality and NPDES.

Smita Deshpande, Senior Environmental Scientist. B.A. in Geography, University of Pune; M.S. in Regional Planning, Indiana University of Pennsylvania, 35 years of

experience in environmental planning. Contribution: Senior review and oversight of preparation the environmental document.

Eric Dickson, Senior Landscape Architect. B.S. in Landscape Architecture, California State Polytechnic University at Pomona. 33 years of experience. Contribution: Senior review of the VIA Questionnaire.

Phi Dinh, Senior Transportation Engineer. M.S. in Civil Engineering, University of California at Los Angeles. 26 years of experience in Caltrans Hydraulics, Design and Construction, 3.5 years in Environmental Engineering with the Department of Navy. Contribution: Review of Hydrology and Floodplains Sections of the Environmental document, preparation of LHS/FER Summary Forms.

Chris Flynn, Deputy District Director of Environmental Analysis, M.S. Environmental Science, San Jose State University. 34 years of experience. Contribution: Supervisory review of the environmental document.

Erin Knight, Environmental Scientist. B.S. Biology, Saint Louis University. 7 years of experience in natural resource analysis and management. Contribution: Preparation of NES-MI and review of biological resources sections.

Alben Phung, Senior Environmental Scientist. B.A. in Environmental Science & Policy, California State University, Long Beach; Masters of Urban and Regional Planning, California Polytechnic University at Pomona. 8 years of experience in environmental planning. Contribution: Senior review of biological, archeological, and paleontological technical studies.

Hector B. Salas, Water Quality Specialist. B.A. in Environmental Analysis and Design, University of California, Irvine. 26 years of experience. Contribution: Preparer of Water Quality Technical Memorandum and water quality sections of the environmental document.

Sunny Saroa, Associate Environmental Planner. B.S. in Environmental Sciences, University of California at Riverside. 7 years of experience conducting research and natural resource management. 2 years of experience in technical environmental document preparation. Contribution: Preparation and review of environmental document.

Andrew Ziaie. Project Engineer. M.S. in Civil Engineering, University of California at Los Angeles. 8 years of experience in Caltrans Design, 9 years of experience in the private sector. Contribution: Preparer of Project Report/Plans.

Chapter 5 Distribution List

The Initial Study and the Notice of Availability was distributed to local, and regional agencies and utility providers affected by the proposed project.

FEDERAL AGENCIES

United States Army Corps of Engineers
Los Angeles District, Regulatory Division
915 Wilshire Blvd, Suite 1109
Los Angeles CA, 90017
Attn: Veronica Li

U.S. Fish and Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, CA. 92008
Attn: Sandra Hamilton

STATE AGENCIES

State Clearinghouse
Office of Planning and Research
1400 10th Street
Sacramento, CA 95814
Attn: Christine Asiata Rodriguez

California Department of Fish and Wildlife
3883 Ruffin Road
San Diego, CA. 92123
Attn: Erika Cleugh

Santa Ana Regional Water Quality Control Board
3737 Main Street, Ste. 500
Riverside, CA. 92501-3348
Attn: Jayne Joy

CA. Office of Historic Preservation
1725 23rd Street, Ste. 100
Sacramento, CA 95816

LOCAL/REGIONAL AGENCIES

City of Irvine
Department of Transportation
1 Civic Center Plaza
P.O. Box 19575
Irvine, CA 92606
Attn: Jaimee Bourgeois
jbourgeois@cityofirvine.org

City of Irvine
Public Information Office
1 Civic Center Plaza
P.O. Box 19575
Irvine, CA 92606
Attn: Kristina Perrigoue
kperrigoue@cityofirvine.org

City of Lake Forest
Communications and Marketing Department
100 Civic Center Dr.
Lake Forest, CA 92630
Attn: Erin Rodriguez
pio@lakeforestca.gov

City of Lake Forest
Public Works Department
100 Civic Center Dr.
Lake Forest, CA 92630
Attn: Doug Erdman
publicworks@lakeforestca.gov

City of Mission Viejo
Public Works Department
200 Civic Center
Mission Viejo, CA 92691
Attn: Rich Schlesinger
publicworks@cityofmissionviejo.org

City of Mission Viejo
Community Relations Department
200 Civic Center
Mission Viejo, CA 92691
Attn: Rich Schick
cr@cityofmissionviejo.org

City of Rancho Santa Margarita
Public Works Department
22112 El Paseo
Rancho Santa Margarita, CA 92688
Attn: Joe Parco
jparco@cityofrsm.org

Orange County Public Works - Planning & Development Department
P.O. Box 4048
Santa Ana, CA 92702-4048

Orange County Public Works - Orange County Flood Control District
601 North Ross Street
Santa Ana, CA 92701

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
Attn: Linjin Sun
lsun@aqmd.gov

South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
Attn: Nahal Mogharabi – Director of Communications
nmogharabi@aqmd.gov

Southern California Association of Governments – Orange County Regional Office
600 S. Main St., Ste. 1108
Orange, CA 92868
Attn: Jonathan Davis
davis@scag.ca.gov

Transportation Corridor Agencies
25 Pacifica, Suite 100
Irvine, CA 92618-3304
Attn: Michelle Miller
mmiller@thetollroads.com

Transportation Corridor Agencies
25 Pacifica, Suite 100
Irvine, CA 92618-3304
Attn: Michelle “Shelley” Kennedy
mkennedy@thetollroads.com

LIBRARIES

OC Library – Foothill Ranch Branch
27002 Cabriole,
Foothill Ranch, CA 92610

OC Library – Rancho Santa Margarita Branch
30902 La Promesa,
Rancho Santa Margarita, CA 92688

ELECTED OFFICIALS

Orange County Supervisor (District 3)
Donald Wagner
Office of Third District Supervisor
Orange County Board of Supervisors
10 Civic Center Plaza
Santa Ana, CA 92701

Assembly (59th District)
Phillip Chen
3 Pointe Drive, Suite 313,
Brea, CA 92821

Assembly (71st District)
Kate Sanchez
22342 Avenida Empresa, Ste. 275
Rancho Santa Margarita, CA 92688

Assembly (72nd District)
Diane Dixon
4100 MacArthur Blvd., Ste. 340
Newport Beach, CA 92660

Assembly (73rd District)
Cottie Petrie-Norris
19712 MacArthur Blvd, Suite 150
Irvine, CA 92612

State Senate (Senate District 37)
Steven Choi
2151 Michelson Drive, Suite 258,
Irvine, CA 92612

State Senate (Senate District 38)
Catherine Blakespear
24031 El Toro Rd., Ste. 201A
Laguna Hills, CA 92653

Congressional District 40
Young Kim
180 N. Riverview Dr. Ste. 150
Anaheim, CA 92808

Congressional District 47
Dave Min
1370 Adams Ave Suite A
Costa Mesa, CA 92626

NATIVE AMERICAN REPRESENTATIVES

Native American Heritage Commission
1550 Harbor Blvd Suite 100,
West Sacramento, CA 95691

Cahuilla Band of Mission Indians
Ray Esparza, Cultural Director
52701 CA Highway 371
Anza, CA, 92539
Phone: (951) 763-5549
besparza@cahuilla-nsn.gov
Cahuilla

Cahuilla Band of Mission Indians
Anthony Madrigal, Tribal Historic Preservation Officer (THPO)
52701 CA Highway 371
Anza, CA, 92539
Phone: (951) 763-5549
anthonymad2002@gmail.com
Cahuilla

Cahuilla Band of Mission Indians
Eric Schenk, Chairperson
52701 CA Highway 371
Anza, CA, 92539
Phone: (951) 590-0942
Fax: (951) 763-2808
chair@cahuilla-nsn.gov
Cahuilla

Gabrieleno Band of Mission Indians - Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA, 91723
Phone: (844) 390-0787
admin@gabrielenoindians.org
Gabrieleno

Gabrieleno Band of Mission Indians - Kizh Nation
Christina Swindall Martinez, Secretary
P.O. Box 393
Covina, CA, 91723
Phone: (844) 390-0787
admin@gabrielenoindians.org
Gabrieleno

Gabrieleno/Tongva San Gabriel Band of Mission Indians
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA, 91778
Phone: (626) 483-3564
Fax: (626) 286-1262
GTTribalcouncil@aol.com
Gabrieleno

Gabrielino Tongva Indians of California Tribal Council
Robert Dorame, Chairperson
P.O. Box 490
Bellflower, CA, 90707
Phone: (562) 761-6417
Fax: (562) 761-6417
gtongva@gmail.com
Gabrielino

Gabrielino Tongva Indians of California Tribal Council
Christina Conley, Cultural Resource Administrator
P.O. Box 941078
Simi Valley, CA, 93094
Phone: (626) 407-8761
christina.marsden@alumni.usc.edu
Gabrielino

Gabrielino/Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St., #231
Los Angeles, CA, 90012
Phone: (951) 807-0479
sgoad@gabrielino-tongva.com
Gabrielino

Gabrielino/Tongva Nation
Charles Alvarez, Chairperson
23454 Vanowen Street
West Hills, CA, 91307
Phone: (310) 403-6048
roadkingcharles@aol.com
Gabrielino

Gabrielino/Tongva Nation
Sam Dunlap, Cultural Resources Director
P.O. Box 3919
Seal Beach, CA, 90740
Phone: (909) 262-9351
tongvatcr@gmail.com
Gabrielino

Juaneno Band of Mission Indians Acjachemen Nation - Belardes
Joyce Perry, Cultural Resources Director
4955 Paseo Segovia
Irvine, CA, 92603
Phone: (949) 293-8522
kaamalam@gmail.com
Juaneno

Juaneno Band of Mission Indians Acjachemen Nation – 84A
Heidi Lucero, Chairperson, TPHO
31411-A La Matanza Street
San Juan Capistrano, CA, 92675
Phone: 562-879-2284
jbmian.chairwoman@gmail.com
Juaneno

Pala Band of Mission Indians
Christopher Nejo, Legal Analyst
cnejo@palatribe.com
PMB 50, 35008 Pala Temecula Road
Pala, CA, 92059
Phone: (760) 891-3564
Cupeno
Luiseno

Pala Band of Mission Indians
Shasta Gaughen, TPHO
PMB 50, 35008 Pala Temecula Road
Pala, CA, 92059
Phone: (760) 891-3515
sgaughen@palatribe.com
Cupeno
Luiseno

Pala Band of Mission Indians
Alexis Wallick, Assistant TPHO
35008 Pala Temecula Road
Pala, CA, 92059
Phone: (760) 891-3537
awallick@palatribe.com
Cupeno
Luiseno

Pechanga Band of Indians
Steve Bodmer, General Counselor
P.O. Box 1477
Temecula, CA, 92593
Phone: (951) 770-6313
Fax: (951) 695-1778
sbodmer@pechanga-nsn.gov

Pechanga Band of Indians
Tubu Ebru Ozdil, Cultural Analyst
P.O. Box 1477
Temecula, CA, 92593
Phone: (951) 770-6313
Fax: (951) 695-1778
eozdil@pechanga-nsn.gov

Rincon Band of Luiseno Indians
Cheryl Madrigal, TPHO
One Government Center Lane
Valley Center, CA, 92082
Phone: (760) 648-3000
cmadrigal@rincon-nsn.gov
Luiseno

Rincon Band of Luiseno Indians
Laurie Gonzalez, Tribal Council/Culture Committee Member
One Government Center Lane
Valley Center, CA, 92082
Phone: (760) 484-4835
lgonzalez@rincon-nsn.gov
Luiseno

Rincon Band of Luiseno Indians
Joseph Linton, Tribal Council/Culture Committee Member
One Government Center Lane
Valley Center, CA, 92082
Phone: (760) 803-3548
jlinton@rincon-nsn.gov
Luiseno

Rincon Band of Luiseno Indians
Denise Turner Walsh, Attorney General
One Government Center Lane
Valley Center, CA, 92082
Phone: (760) 689-5727
dwalsh@rincon-nsn.gov
Luiseno

Santa Rosa Band of Cahuilla Indians
Vanessa Minott, Tribal Administrator
P.O. Box 391820
Anza, CA, 92539
Phone: (951) 659-2700
Fax: (951) 659-2228
vminott@santarosa-nsn.gov
Cahuilla

Santa Rosa Band of Cahuilla Indians
Steven Estrada, Tribal Chairman
Vanessa Minott, Tribal Administrator
P.O. Box 391820
Anza, CA, 92539
Phone: (951) 659-2700
Fax: (951) 659-2228
sestrada@santarosa-nsn.gov
Cahuilla

Soboba Band of Luiseno Indians
Jessica Valdez, Cultural Resource Specialist
P.O. Box 487
San Jacinto, CA, 92581
(951) 663-6261
Fax: (951) 654-4198
jvaldez@soboba-nsn.gov
Cahuilla
Luiseno

Soboba Band of Luiseno Indians
Joseph Ontiveros, THPO
P.O. Box 487
San Jacinto, CA, 92581
Phone: (951) 663-5279
Fax: (951) 654-4198
jontiveros@soboba-nsn.gov
Cahuilla
Luiseno

Appendix A Title VI/Non-Discrimination Policy Statement

California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS–49 | SACRAMENTO, CA 94273–0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
www.dot.ca.gov

September 2025

TITLE VI/NON-DISCRIMINATION POLICY STATEMENT

It is the policy of the California Department of Transportation (Caltrans), in accordance with Title VI of the Civil Rights Act of 1964 and the assurances set forth in the Caltrans' Title VI Program Plan, to ensure that no person in the United States shall on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. Related non-discrimination authorities, remedies, and state law further those protections, including sex, disability, religion, sexual orientation, age, low income, and Limited English Proficiency (LEP).

Caltrans is committed to complying with 23 C.F.R. Part 200, 49 C.F.R. Part 21, 49 C.F.R. Part 303, and the Federal Transit Administration Circular 4702.1B. Caltrans will make every effort to ensure nondiscrimination in all of its services, programs, and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin (including LEP). In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

The overall responsibility for this policy is assigned to the Caltrans Director. The Caltrans Title VI Coordinator is assigned to the Caltrans Office of Civil Rights Deputy Director, who then delegates sufficient responsibility and authority to the Office of Civil Rights' managers, including the Title VI Branch Manager, to effectively implement the Caltrans Title VI Program. Individuals with questions or requiring additional information relating to the policy or the implementation of the Caltrans Title VI Program should contact the Title VI Branch Manager at title.vi@dot.ca.gov or at (916) 639-6392, or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

Dina El-Tawansy (Sep 12, 2025 16:52:12 PDT)

DINA A. EL-TAWANSY
Director

Appendix B RTIP-FTIP

2025 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
GROUP LISTINGS
(in $000's)

Grouped Projects for Pavement resurfacing and/or rehabilitation - SHOPP Roadway Preservation Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories

ROADWAY PRESERVATION PROJECTS

RTIP #	DESCRIPTION	PHASE	24/25	25/26	26/27	27/28	Total
ORA001103	On route 91, in Anaheim and Placentia, from Acacia Street to La Palma Avenue. PM (4.8/6.4) Rehabilitate pavement. G13 contingency.	E	$ 2,485				$ 2,485
	EA 0R312	R	$ 20				$ 20
	New 2020 SHOPP adopted project at May 2020 CTC. $22,264 Construction to be programmed at future date. Program CON phase thru PCR Mar 2024. Carry over to 24/25 due to allocation extension from 23/24.	C	$ 22,264				$ 22,264
ORA001103	On Route 405, in and near Costa Mesa, Fountain Valley, Huntington Beach, and Westminster, from Harbor Boulevard to south of McFadden Avenue. Rehabilitate pavement and drainage systems, and add traffic census stations.	E	$ 1,618				$ 1,618
	EA 0R330	R	$ 21				$ 21
	New 2022 SHOPP adopted project at March 2022 CTC.	C	$ 10,827	$ -			$ 10,827
ORA001103	On Route 5, in San Clemente, Dana Point, and San Juan Capistrano, from the San Diego County line to north of Route 74. Rehabilitate pavement, enhance highway worker safety, upgrade bridge rail, overhead sign structure, and lighting, restore drainage systems, construct stormwater treatment Best Management Practices (BMPs), and upgrade facilities to Americans with Disabilities Act (ADA) standards.	E		$ 6,425			$ 6,425
	EA 0R970	R		$ 100			$ 100
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs through May 2023 CTC action. Update costs thru June 2023 CTC action. Update costs thru June 2023 CTC action. Update costs through March 2024 CTC action.	C		$29,127			$ 29,127
ORA001103	On Route 5, in San Juan Capistrano, Mission Viejo, Laguna Niguel, and Irvine, from north of Route 74 to Route 405. Rehabilitate pavement and drainage systems, upgrade lighting, enhance highway worker safety, replace overhead sign panels, construct bicycle and pedestrian improvements, and construct stormwater treatment Best Management Practices (BMPs).	E	$ 10,105				$ 10,105
	EA 0S380	R	$ 330				$ 330
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs thru June 2023 CTC action.	C	$ 50,897	$ -			$ 50,897
ORA001103	On Route 5, in and near the cities of Tustin, Santa Ana, Orange, Anaheim, Fullerton, and Buena Park, from Route 55 to the Los Angeles County line. Rehabilitate roadway and drainage systems, upgrade guardrail and pump plant, enhance highway worker safety, replace overhead sign panels, and upgrade facilities to Americans with Disabilities Act (ADA) standards.	E		$ 8,630			$ 8,630
	EA 0S500	R		$ 4			$ 4
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs thru June 2023 CTC action.	C		$40,126			$ 40,126
ORA001103	On Route 5, in and near Irvine, from Route 133 to Yale Avenue. Rehabilitate roadway and drainage systems, enhance highway worker safety, replace roadside sign panels, and construct stormwater treatment Best Management Practices (BMPs).	E	$ 3,370				$ 3,370
	EA 0S051	R					$ -
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs through March 2023 CTC action. Update costs thru Mar 2024 CTC action. Update costs, program code and description thru June 2024	C	$ 33,240	$ -			$ 33,240
ORA001103	On Route 5, in and near Irvine and Tustin, from Yale Avenue to Route 55. Rehabilitate roadway and drainage systems, enhance highway worker safety, and install census stations.	E	$ 2,810				$ 2,810
	EA 0S052	R					$ -
	New 2022 SHOPP adopted project at March 2022 CTC. Update costs thru Mar 2024 CTC action. Update costs, program code and description thru June 2024 CTC action.	C	$ 23,209	$ -			$ 23,209
ORA001103	On Route 39, in Huntington Beach and Westminster, from Route 1 to Route 22. Rehabilitate pavement by grinding and placing Rubberized Hot Mix Asphalt (RHMA), rehabilitate drainage systems, and upgrade curb ramps, crosswalks, and lighting.	E			$ 6,413		$ 6,413
	EA 0R360	R			$ 4,687		$ 4,687
	New project at March 2024 SHOPP adoption.	C		$ -	$35,030	$ -	$ 35,030

3/25/2024 11:34 PM

2025 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM
ORANGE COUNTY
GROUP LISTINGS
(in $000's)

Grouped Projects for Pavement resurfacing and/or rehabilitation - SHOPP Roadway Preservation Program. Scope: Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories

ROADWAY PRESERVATION PROJECTS

RTIP #	DESCRIPTION	PHASE	24/25	25/26	26/27	27/28	Total
ORA001103	On Route 74, in and near San Juan Capistrano, from Route 5 to 1.0 mile east of San Juan Creek Bridge. Rehabilitate pavement by grinding and placing Rubberized Hot Mix Asphalt (RHMA), upgrade Transportation Management System (TMS) elements, upgrade guardrail and crosswalks, add bike lane pavement markings, and replace striping.	E			$ 6,425		$ 6,425
	EA 0R990	R			$ 1,050		$ 1,050
	New project at March 2024 SHOPP adoption.	C		$ -	$28,509	$ -	$ 28,509
ORA001103	On Route 241, in and near Rancho Santa Margarita, Mission Viejo, and Lake Forest, from Oso Parkway to 0.4 mile north of Route 133. Rehabilitate pavement by grinding and placing Rubberized Hot Mix Asphalt (RHMA), rehabilitate drainage systems and lighting, upgrade guardrail, install curve warning signs and rumble strips, and enhance highway worker safety.	E				$ 8,124	$ 8,124
	EA 0T270	R					$ -
	New project at March 2024 SHOPP adoption.	C		$ -		$41,046	$ 41,046
	Total SHOPP Projects		$161,196	$84,412	$82,114	$49,170	$376,892

Appendix C Avoidance, Minimization, and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this Environmental Commitments Record are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following Environmental Commitments Record is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. NOTE: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this Environmental Commitments Record.

Environmental Commitments Record (ECR)

DIST-CO-RTE: 12 - ORA - 241 **PM/PM:** 14.500/27.800 **EA/Project ID:** 12-0T270_ / 1222000027

Project Description: Cold plane and replace HMA on main lanes and shoulders. Restore drainage system. Replace lighting with new LED lights and conduits. Improve roadside safety and landscape

Date (Last modification): 3/23/2026

Environmental Planner: Sunny Saroa **Phone:** 949-556-2513

Construction Liaison: Sunny Saroa **Phone:** 949-556-2513

Resident Engineer: TBD **Phone:**

PERMITS

Permit	Agency	Application Submitted	Permit Received	Permit Expiration	Permit Requirements Completed by	Permit Requirements Completed on	Comments
NOI/NOT (Stormwater)	State Water Quality Board						

ENVIRONMENTAL COMMITMENTS

PS&E/BEFORE RTL

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Hazardous Waste	PF-HAZ-1: The project involves excavation during repair or replacement of guardrail and improvement of drainage facilities. Aerially Deposited Lead (ADL) investigation is required at the soil disturbance area. ADL investigation will be completed during PS&E phase. The investigation will be conducted during PS&E phase. Design Branch is required to submit an ADL investigation request with a plan highlighting the soil disturbance areas and details of excavation including depth and length of the excavation. Based on the findings of the investigation, Standard Special Provisions (SSP) for the removal of ADL contaminated soil will be provided. During the construction, the appropriate SSP will be implemented.	SSP	SSP	Project Engineer Hazardous Waste Specialist	PE to request ADL investigation during PS&E					No
Hazardous Waste	PF-HAZ-4 : Traffic striping/markings, and other colors of paint contains lead at the concentration less than hazardous level of concentration. SSP for non-hazardous paint will be provided in the PS&E phase of the project. Contractor will follow the appropriate SSP for the removal of the traffic striping/markings and other paints.	SSP	SSP	Hazardous Waste Specialist	Identify traffic striping/marking SSP during PS&E.					No
Paleontology	PAL-1: A Paleontological Mitigation Plan (PMP) will be required at 65% PS&E that outlines the mitigation measures for paleontological services adhered during construction.	PER	SSP	District Paleontologist	Complete PMP at 65% PSE					Yes
Transportation	PF-TRA-1: A Transportation Management Plan (TMP) shall	Std. Spec	Std. Spec	Project Engineer	Develop TMP.					No

Category	Task and Brief Description	Source	Included in PS&E	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed	Remarks	Mitigation for significant impacts under
	be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g., prior notices, sign posting, detours) as determined appropriate by the Department. Adequate local emergency access shall be provided at all times to adjacent uses. Proper detours and warning signs should be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.									

PRE-CONSTRUCTION

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Biology	PF-BIO-1: Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.	SSP	SSP	Resident Engineer	Install ESA fence before construction.					No
Cultural Resources	PF-CUL-3: Cultural Sensitivity Training. Cultural Sensitivity Training must be provided to the Contractor prior to the start of construction at the pre-construction meeting and/or the construction kick off meeting. This training can be done separately or in conjunction with other environmental training (i.e. WEAT/WEAP/Biological Awareness Training).	Std. Spec	Std. Spec	Resident Engineer	Provide Cultural Sensitivity Training.					No
Paleontology	PAL-2: PMP (Pre-Construction) Mandatory Paleontological Awareness Training (30 mins) conducted by District 12 Archaeologist or/Paleontologist, will be conducted prior to any construction work for all parties that will be onsite.	PER	NSSP	District Paleontologist Resident Engineer	Provide Paleo Awareness Training.					Yes

Environmental Commitments Record for 12-0T270, Rte 241, Multi Asset

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA

CONSTRUCTION

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Air Quality	PF-AQ-1: The construction contractor must comply with the Department Standard Specification in Section 14-9, Air Quality (2025), which specifically requires compliance by the contractor with all applicable environmental laws and regulations related to air quality, including air pollution control district and air quality management district regulations and ordinances.	Std. Spec	Std. Spec	Resident Engineer	Follow Standard Specifications in Section 14-9.					No
Biology	PF-BIO-1: Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.	SSP	SSP	Resident Engineer	No work will be allowed with the ESA fencing.					No
Biology	PF-BIO-2: Construction equipment/vehicle staging, storage, maintenance, and dispensing of fuel/oil shall occur within the paved road unless approved by the Caltrans Biologist.	SSP	SSP	Resident Engineer	All storage and staging to occur within the paved road unless approved by the Caltrans Biologist					No
Biology	PF-BIO-3: Night work shall be avoided. If night work is necessary, all lighting used at night for project construction will be of the lowest illumination necessary for human safety and will be selectively placed and directed at the immediate work area and away from adjacent habitats, specifically coastal sage scrub. Light glare shields will be used to reduce the extent of illumination into habitats.	SSP	SSP	Resident Engineer	Avoid night work if possible. Use low and shielded lighting.					No
Biology	PF-BIO-4: Work within 500 feet of suitable CAGN habitat shall avoid the CAGN nesting season (February 15 – August 31). If work must occur during the CAGN nesting season, a Caltrans biologist will conduct a preconstruction survey for gnatcatchers within 3 days of the start of work within 500 feet of suitable habitat. If CAGN are found, the Caltrans biologist will coordinate with USFWS. No work will occur within 500 feet of the active nest without written	SSP	SSP	Resident Engineer Project Biologist	Avoid CAGN nesting season or conduct CAGN Precon survey.					No

	approval from USFWS.					
Biology	PF-BIO-5: Work shall occur outside of the nesting bird season (February 1 – September 30). If any vegetation removal must occur during the nesting bird season, then a pre-construction survey by a Caltrans Biologist must be conducted within 72 hours prior to the start of work. The RE must request the nesting bird survey with at least 2 weeks of a notice to the Caltrans Biologist. If any active nests are found, the Caltrans Biologist will determine a no work buffer (up to 500 feet) and if any resource agency coordination needs to occur.	SSP	SSP	Resident Engineer	Request nesting bird survey if work occurs within the nesting bird season.	No
Biology	PF-BIO-6: Any vegetation removal that may include invasive plant species will be properly disposed of at a landfill, or similar. No plant materials will be disposed of will be disposed of within the project site.	Std. Spec	Std. Spec	Resident Engineer	Properly dispose of vegetation.	No
Biology	PF-BIO-7: Equipment will not be cleaned within 250 feet of a waterway or upslope of a waterway where plant materials could be washed downhill into a waterway.	SSP	SSP	Resident Engineer	Do not clean equipment upslope of or within 250 feet of a waterway.	No
Biology	PF-BIO-8: Revegetation and landscaping efforts will not include any plant species known to be invasive by either the California Invasive Plant Council or the US Department of Agriculture.	SSP	SSP	Resident Engineer	Do not plant any invasive species.	No
Cultural Resources	PF-CUL-1: Discovery of Cultural Materials. If buried cultural resources are encountered during Project Activities, it is the Department policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.	Std. Spec	Std. Spec	Resident Engineer	Stop work within 60 feet if cultural resources are found.	No
Cultural Resources	PF-CUL-2: Discovery of Human Remains. In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 12 Division of Environmental Analysis; Environmental Branch Chief (EBC) and District Native American Coordinator, DNAC. Further provisions of PRC 5097.98 are to be followed as applicable.	SSP	SSP	Resident Engineer	If human remains are found, notify county coroner and stop work within 60 feet. Contact EBC and DNAC.	No
Cultural Resources	PF-CUL-3: Cultural Sensitivity Training. Cultural Sensitivity Training must be provided to the Contractor prior to the start of construction at the pre-construction meeting and/or the construction kick off meeting. This training can be done separately or in conjunction with other environmental	Std. Spec	Std. Spec	Resident Engineer	Provide Cultural Sensitivity Training.	No

	training (i.e. WEAT/WEAP/Biological Awareness Training).					
Hazardous Waste	PF-HAZ-2: The proposed project includes removal of existing wood posts for Metal Guardrail System (MGS) supports and signposts, which contain chemical preservatives. The wood posts are considered treated wood waste (TWW). For the management and disposal of TWW, the contract must follow the DTSC regulation. Specification for the management of TWW will be provided in the PS&E phase. During construction, the appropriate SSP will be implemented.	SSP	SSP	Resident Engineer	Follow DTSC regulation for management and disposal of treated wood waste.	No
Hazardous Waste	PF-HAZ-3 : During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 of the California Department of Transportation (Caltrans) Construction Manual and 14-11.02 of the Department Standard Specification (2025).	Std. Spec	Std. Spec	Resident Engineer	Follow Unknown Hazards Procedures in Chapter 7 of Caltrans Construction Manual and Standard Spec 14-11.02.	No
Noise	PF-N-1: Noise Control: Contractor must comply with the Department's Standard Specification 14-8.02, "Noise Control" (2025) during construction. The specification states following: Control and monitor noise resulting from work activities. Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m.	Std. Spec	Std. Spec	Resident Engineer	Do not exceed 86 dBA Lmax at 50 feet from the job site from 9 p.m. to 6 a.m.	No
Paleontology	PF-PAL-1: Discovery of Unanticipated Paleontological Resources. If unanticipated paleontological resources are discovered during Project Activities, it is Caltrans policy that work stop within 60 feet of the area until a Caltrans Project Paleontologist/Archaeologist can evaluate the nature and significance of the find.	Std. Spec	Std. Spec	Resident Engineer	Stop work within 60 feet if paleontological resources are found.	No
Water Quality	PF-WQ-1: The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2022-0033-DWQ, NPDES No. CAS000003 and the and any subsequent permits in effect at the time of construction	Std. Spec	Std. Spec	Resident Engineer	Comply with NPDES Permit Order No. 2022-0033-DWQ, NPDES No. CAS000003	No
Water Quality	PF-WQ-2: The project will comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No.	Std. Spec	Std. Spec	Resident Engineer	Comply with NPDES Permit Order No. 2022-0057-DWQ, NPDES No.	No

	2022-0057-DWQ, NPDES No. CAS000002 and any subsequent permits in effect at the time of construction.				CAS000002	
Water Quality	PF-WQ-3: The project will comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have potential impact on water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-storm water BMPs.	Std. Spec	Std. Spec	Resident Engineer	Prepare and implement SWPPP.	No
Water Quality	PF-WQ-4: Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.	Std. Spec	Std. Spec	Resident Engineer	Implement Design Pollution Prevention BMPs	No
GHG Emissions	GHG-1: The following emissions reduction strategies should be implemented during construction: • Reduction of construction waste • Energy efficient construction methodologies • Fuel efficient measures for equipment and traffic management • Local materials to be used where feasible/available to reduce GHG emissions • Reduced frequency of vehicle idle times	Env Doc	n/a	Resident Engineer	Incorporate GHG emissions reduction strategies.	No
Transportation	PF-TRA-1: A Transportation Management Plan (TMP) shall be included in the design plans for implementation by the contractor prior to and during construction of any improvements. The TMP shall consist of prior notices, adequate sign posting, detours, phased construction, and temporary driveways where necessary. The TMP shall specify implementation timing of each plan element (e.g.,	Std. Spec	Std. Spec	Resident Engineer	Follow TMP.	No

prior notices, sign posting, detours) as determined appropriate by the Department. Adequate local emergency access shall be provided at all times to adjacent uses. Proper detours and warning signs should be established to ensure public safety. The TMP shall be devised so that construction shall not interfere with any emergency response or evacuation plans. Construction activities shall proceed in a timely manner to reduce impacts.

Appendix D List of Technical Studies

The studies listed below support the environmental analyses and determinations made in this document. They are hereby incorporated by reference into this environmental document and are available upon request.

Air Quality, and Noise, and Hazardous Waste Technical Memorandum (November 2025) – Prepared by Caltrans District 12

Historic Property Survey Report (HPSR) (April 2026) – Prepared by Caltrans District 12

> Please note, many state and federal laws limit the disclosure of sensitive cultural and tribal resource information to the public. Additional information regarding confidentiality of these resources can be found in the SER Volume 2, Cultural Resources, in Section 3.4.13 and Section 5.3.6.

Location Hydraulic Study Form and Summary Floodplain Encroachment Report (February 2026) – Prepared by Caltrans District 12

Natural Environment Study (Minimal Impacts) (June 2025) – Prepared by Caltrans District 12

Paleontological Identification Report and *Paleontological Evaluation Report* (March 2026) – Prepared by Caltrans District 12

Initial Site Assessment Checklist (November 2025) – Prepared by Caltrans District 12

Visual Impact Assessment Questionnaire (February 2026) – Prepared by Caltrans District 12

Water Quality Technical Memorandum (March 2026) – Prepared by Caltrans District 12