

Marina to Castroville CAPM

On State Route 1 in Monterey County

05-MON-1-PM-R85.1-R90.98

Project ID Number 0520000135

Initial Study with Proposed Mitigated Negative Declaration

Volume 1 of 2



Prepared by the
State of California Department of Transportation

January 2024



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 alternatives being considered for the proposed project in Monterey County in California. The document explains why the project is being proposed, the alternatives being considered for the project, the existing environment that could be affected by the project, potential impacts of each of the alternatives, and proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read the document. Additional copies of the document and the related technical studies are available for review at the Caltrans district office at 50 Higuera Street, San Luis Obispo, California 93401, Monday through Friday, from 8:00 a.m. to 5:00 p.m. If you would like to receive a printed version of this document, please contact Lara Bertaina at 805-779-0792 or by email at lara.bertaina@dot.ca.gov. This document may be downloaded at the following website:
<https://dot.ca.gov/caltrans-near-me/district-5/district-5-current-projects/05-1n160>
- Tell us what you think. If you have any comments regarding the proposed project, please request a public hearing and/or send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to: Lara Bertaina, District 5 Environmental Division, California Department of Transportation, 50 Higuera Street, San Luis Obispo, California 93401. Submit comments via email to: lara.bertaina@dot.ca.gov.
- Submit comments by the deadline: February 16, 2024.

What happens next:

After comments are received from the public and the 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 appropriated, Caltrans could design and construct all or part of the project.

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Preserve pavement, pave beyond the gore areas, rehabilitate one drainage system, replace traffic management system elements, conduct lighting rehabilitation, and upgrade guardrails to Manual for Assessing Safety Hardware (MASH) standards on State Route 1 from post miles R85.1 to R90.98 in Monterey 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
and

Responsible Agencies:

California Transportation Commission
California Department of Fish and Wildlife
Central Coast Regional Water Quality Control Board

Cooperating Agencies:

U.S. Army Corps of Engineers
U.S. Fish and Wildlife Service
National Marine Fisheries Service



Jason Wilkinson
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12/15/23

Date

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DRAFT

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number: [pending]

District-County-Route-Post Mile: 05-MON-1-PM R85.1-R90.98

EA/Project Number: EA 05-1N160 and Project ID Number 0520000135

Project Description

The California Department of Transportation (Caltrans) proposes to preserve 22.2 lane miles of Class 2 pavement, pave beyond gore areas, rehabilitate one drainage system, replace traffic management system elements, conduct lighting rehabilitation, build bicycle and pedestrian infrastructure, and upgrade guardrails to the Manual for Assessing Safety Hardware (MASH) standards. The proposed project is located on State Route 1 in Monterey County, from 0.28 mile south of the South Marina Overhead (44-211L) to the State Route 1/156 Junction. The project area is an approximately 5.88-mile section of State Route 1. At this location, State Route 1 is a four-to-six-lane access-controlled freeway consisting of 12-foot-wide travel lanes with paved shoulders that vary from 5 to 10 feet in width.

Determination

An Initial Study has been prepared by Caltrans District 5. On the basis of this study, 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:

- To mitigate any impact on the Smith's blue butterfly, an assemblage of native species will be used for the revegetation of project sites. Seacliff buckwheat seeds or plants will only be placed outside the vegetation control areas. The spread of invasive weeds during revegetation efforts will be controlled according to the Vegetation Management Guidelines developed as part of the Big Sur Coast Highway Management Plan.

Jason Wilkinson
Deputy District Director Environmental, District 5
California Department of Transportation

Date

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Chapter 1 **Proposed Project**

1.1 Introduction

The California Department of Transportation (known as Caltrans) proposes the Marina to Castroville CAPM project on State Route 1 in Monterey County.

For the proposed project, Caltrans is the lead agency under the California Environmental Quality Act (known as CEQA). Caltrans is also the lead agency under the National Environmental Policy Act (known as NEPA). Caltrans has determined that the project qualifies for a Categorical Exclusion under NEPA and will complete that documentation before project approval.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of this project is to preserve and extend the service life of the existing pavement and facilities. The project will restore culverts in poor condition to protect the embankment and roadway from potential slope failure, replace guardrail systems to meet current standards, and restore traffic management system elements in poor condition to allow for effective traffic management. Finally, this project will reduce the amount of maintenance worker exposure to high-speed traffic by providing an improved work environment for maintenance personnel and an upgraded facility for the traveling public.

1.2.2 Need

Deteriorating pavement conditions within the project limits require pavement rehabilitation. Without rehabilitation, further deterioration of the pavement will result in the failure of the underlying bearing materials, requiring a more costly reconstruction of the roadway. Traffic management system elements, beyond the gore area paving, and guardrail systems are either at the end of their service life, not present, or are not up to current standards. If these issues are not addressed, the consequences would be higher costs, more frequent maintenance activities, and a possible disruption of service for the facility.

1.3 Project Description

The proposed project is on State Route 1 in Monterey County, from 0.28 mile south of the South Marina Overhead (44-211L) to the State Route 1/156 Junction. The project area is an approximately 5.88-mile section of State

Route 1. At this location, State Route 1 is a four-to-six-lane access-controlled freeway consisting of 12-foot-wide travel lanes with paved shoulders that vary from 5 to 10 feet in width. The project proposes to preserve 22.2 lane miles of Class 2 pavement, pave beyond gore areas, rehabilitate one drainage system, replace traffic management system elements, conduct lighting rehabilitation, and upgrade guardrails to Manual for Assessing Safety Hardware (MASH) standards. Figure 1-1 shows the project vicinity map, and Figure 1-2 shows the project location map.

Figure 1-1 Project Vicinity Map

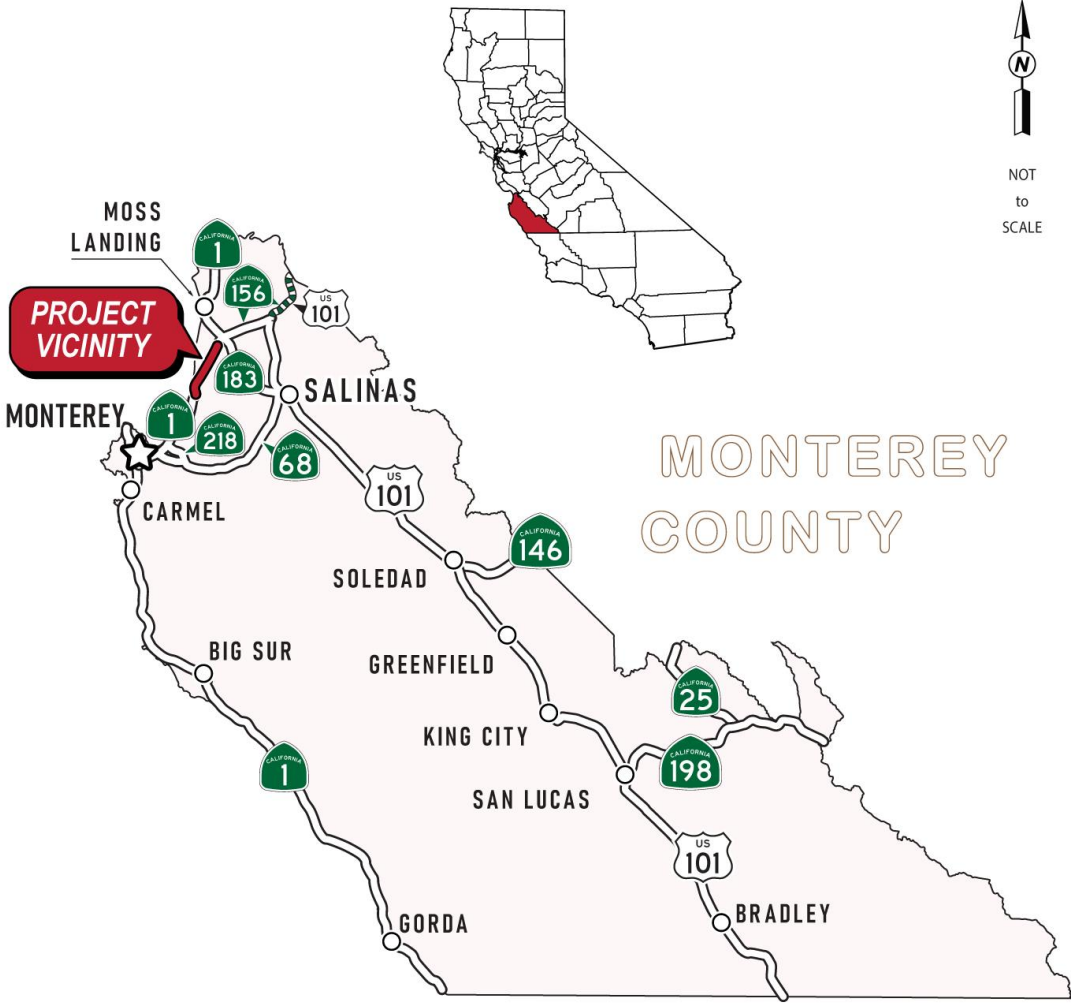
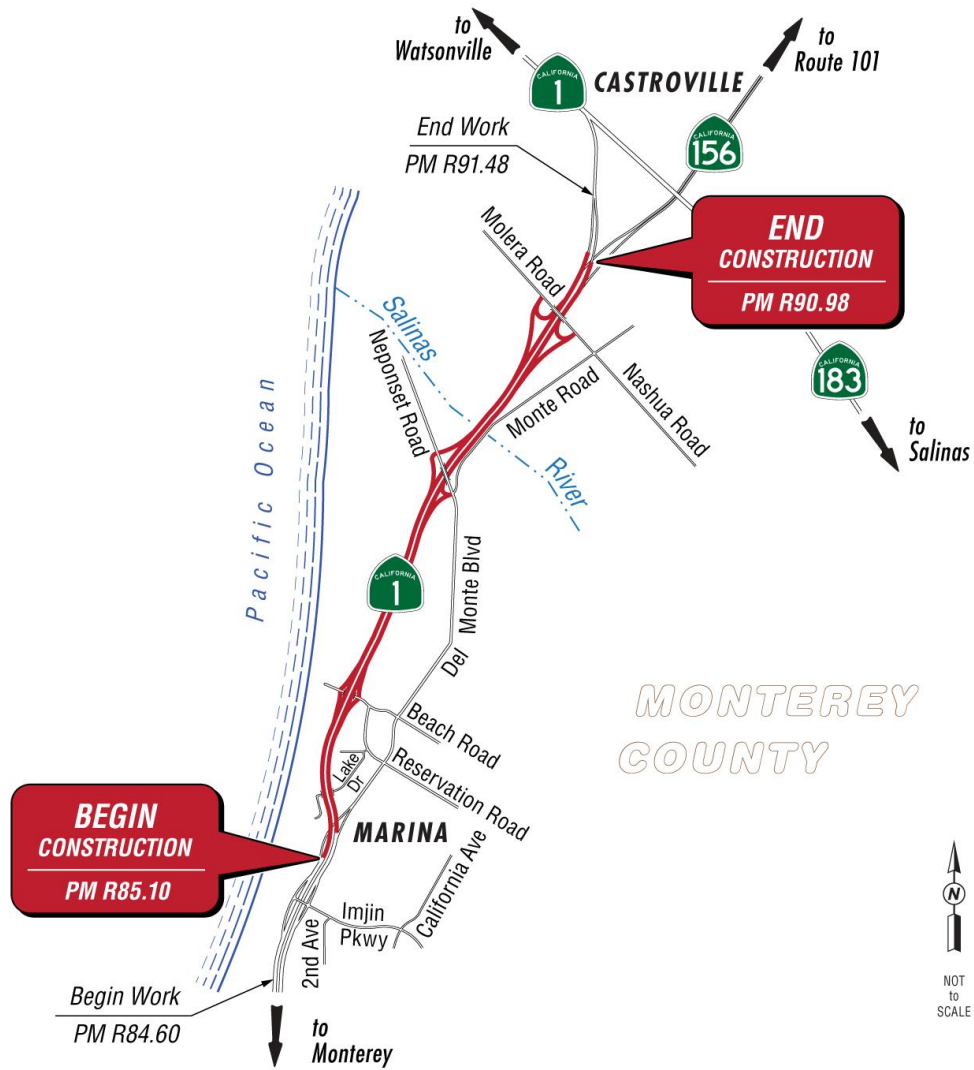


Figure 1-2 Project Location Map



1.4 Project Alternatives

The project development team has analyzed two alternatives—the Build Alternative and the No-Build (No-Action) Alternative.

- Build Alternative

This project contains a number of standardized project measures that are used on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are listed later in this chapter under “Standard Measures and Best Management Practices Included in All Build Alternatives.”

The Build Alternative proposes the following asset improvements:

The asphalt concrete lanes and shoulders would be overlaid with 0.2 foot of Rubberized Hot Mix Asphalt-Gap Graded to rehabilitate and extend the service life of the pavement. At the interchanges, the overlay would be extended to the end of the ramps. Heavily distressed pavement would be repaired with dig outs. The anticipated performance life of the pavement is about 10 years.

1. Mainline

- a. Place 0.2 foot of Rubberized Hot Mix Asphalt.
- b. Dig Outs: Repair severely distressed or failing asphalt pavement with partial depth replacement.

2. Striping

- a. Replace the existing traffic stripe and pavement marking to meet current standards.

3. Rumble Strips

- a. The existing rumble strips would be ground out as part of the cold plane operations. New shoulder rumble strips would be constructed.

4. Pave Beyond Gore Areas

- a. There are 19 locations where paving beyond the gore area is proposed.
- b. Paving beyond gore areas will include aesthetic treatments such as integral color or texture to match the existing aesthetic treatment and be consistent with local expectations.

5. Guardrail

- a. Remove existing guardrails and install Midwest Guardrail System features at 21 locations.
- b. All end treatments would need to be replaced with new Manual for Assessing Safety Hardware (MASH) standards-approved end treatments.
- c. End block transitions are proposed at the following locations: South Marina Overhead (44-211R) northbound departure right side (remove and reconstruct); Salinas River Bridge (44-0215R) northbound approach left and right sides; Salinas River Bridge (44-0215L) southbound approach left and right sides; and State Route 1/156 Separation (44-0218R) northbound approach left and right sides.
- d. Existing vegetation control would be replaced with crushed shale.
- e. All new and/or upgraded guardrails would include aesthetic treatment to match existing conditions within the corridor.

6. Dike

- a. Dikes would be modified along new Midwest Guardrail Systems.

7. Shoulder Backing

- a. Place shoulder backing throughout the entire project limits to protect the facility from erosion or weathering at the edge of pavement.

8. Traffic Management System

- a. Replace one count station at post mile R89.17.
- b. Replace the closed-circuit television (mounted on the vehicle detection system pole) at post mile R89.17.

9. Lighting Rehabilitation

- a. At Reservation Road (post mile R86.5), northbound and southbound off-ramps and electroliers would be relocated per Caltrans standards.

10. Dig Outs

- a. Fix the pavement at locations with excessive damage.

11. Drainage

- a. One drainage system would be repaired or replaced at Reservation Road (post mile R86.5).

- b. Asphalt concrete spillways would be replaced in eight locations.

12. Bicycle and Pedestrian Infrastructure

- a. Four curb ramps compliant with the Americans with Disabilities Act would be built at Reservation Road (post mile R86.5) ramp termini.
- b. Crosswalks would be built, and bike lane striping would be placed at Reservation Road ramp termini.
- c. A retaining wall may be required at Reservation Road as part of the bicycle and pedestrian infrastructure.

1.4.1 No-Build (No-Action) Alternative

The No-Build Alternative would result in further degradation of the facility, requiring additional maintenance and potential roadway failure. The drainage facilities and pavement would remain in their current condition and continue to deteriorate, which could compromise the roadway. Routine maintenance would continue.

1.5 Standard Measures and Best Management Practices Included in All Build Alternatives

The project would include a list of Caltrans standard measures that are typically used on all Caltrans projects. Caltrans standard measures are considered features of the project and are evaluated as part of the project. Caltrans standard measures are not implemented to address any specific effects, impacts, or circumstances associated with the project but are instead implemented as part of the project's design to address common issues encountered on projects. The measures listed below are related to environmental resources and are applicable to the project. These measures can be found in the Caltrans 2023 Standard Specifications document.

- 7-1 Legal Relations and Responsibility to the Public
- 10-4 Water Usage
- 10-5 Dust Control
- 10-6 Watering
- 12-1 Temporary Traffic Control
- 12-3 Temporary Traffic Control Devices
- 12-4 Traffic Control Systems

- 13-1 Water Pollution Control
- 13-2 Water Pollution Control Program
- 13-4 Job Site Management
- 13-6 Temporary Sediment Control
- 13-7 Temporary Tracking Control
- 13-10 Temporary Linear Sediment Barriers
- 14-1 Environmental Stewardship
- 14-2 Cultural Resources
- 14-6 Biological Resources
- 14-7 Paleontological Resources
- 14-8 Noise and Vibration
- 14-9 Air Quality
- 14-10 Solid Waste Disposal and Recycling
- 14-11 Hazardous Waste and Contamination
- 14-12 Other Agency Regulatory Requirements
- 17-2 Clearing and Grubbing
- 18-1 Dust Palliatives
- 20-1 Landscape
- 20-3 Planting
- 20-4 Plant Establishment Work
- 21-2 Erosion Control Work

Additional standard measures would be added to the project as necessary or appropriate.

1.6 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation, supporting a Categorical Exclusion determination, has been prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the U.S. National Marine Fisheries Service and the U.S. Fish and Wildlife Service—that is, species protected by the Federal Endangered Species Act).

1.7 Permits and Approvals Needed

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

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service	Programmatic Biological Opinion; Smith's Blue Butterfly	To be obtained before approval of the final environmental document.
California Coastal Commission	Coastal Development Permit	To be obtained before construction.
Monterey County	Coastal Development Permit	To be obtained before construction.
California Transportation Commission	Project Funding for Future Phases	To be obtained before the beginning of the project's design phase.

Chapter 2 CEQA Evaluation

2.1 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant Impact with Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A “No Impact” answer reflects this determination. The questions in this checklist 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.

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

2.1.1 Aesthetics

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic, and historic environmental qualities” (California Public Resources Code Section 21001[b]). Considering the information in the Visual Impact Assessment dated December 2022, the following significance determinations have been made:

Except as provided in Public Resources Code Section 21099:

Question—Would the project:	CEQA Significance Determinations for Aesthetics
a) Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact

Question—Would the project:	CEQA Significance Determinations for Aesthetics
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?	Less Than Significant Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact

Affected Environment

State Route 1 within the project limits is not classified as an Officially Designated State Scenic Highway. State Route 1 within the project limits passes through relatively flat topography characterized by sand dunes near the City of Marina, transitioning to agricultural fields with occasional industrial uses. The highway crosses the Salinas River, and as it nears Castroville, residential and commercial uses begin.

Most of the views are predominately agricultural fields, but viewers will also see occasional views of the sea, along with rural residential and commercial buildings. This project is partially within the coastal zone, and its visual character is influenced by its proximity to coastal visual resources and natural areas.

Environmental Consequences

Scenic vistas in the vicinity of State Route 1 vary throughout the project limits and include views of agricultural and open space and gently sloping topography with natural vegetation patterns. Overhead utilities, signage, lighting, and other elements are commonly seen throughout more developed areas. The new guardrails would be slightly taller but would not affect scenic vistas. The proposed retaining wall associated with the bicycle and pedestrian infrastructure would also not affect any scenic vistas due to its relatively short height and location at a lower elevation than State Route 1. The proposed improvements would cause minimal, if any, effects on the views of scenic

vistas in the area. The distant hills and fields would remain visible and would continue to contribute to the scenic vista.

The existing visual character of the project area is based primarily on its agricultural character, along with the sand dunes and scattered low-growing vegetation that parallel the roadway. The more developed areas within the project area are characterized by a mix of residential and commercial buildings. Proposed project elements, such as structures related to culvert improvements, traffic management system elements, and additional paving, would be readily visible from the roadway. By themselves, these types of elements are not uncommon and would not be seen as unexpected visual elements in a highway setting. The addition of all these elements would create a more utilitarian appearance and add a degree of visual clutter to the setting. As a result, these visual changes would cause a minor reduction in rural character and visual quality in the immediate project settings. Aesthetically treating the gore paving areas and staining or darkening new metal roadside elements would help to blend with the surroundings and be less noticeable in the landscape. If tree removal occurs as part of the bicycle and pedestrian infrastructure improvements proposed at Reservation Road, the trees would be replaced, and it is expected that over time, the casual observer would not notice them. Measures specifically addressing the visual effects, however, would minimize the noticeability of the individual project elements and reduce their potential effect on the existing visual character.

Although no new lighting is proposed, existing luminaries are proposed to be replaced. Lighting currently exists within the project limits, is not uncommon in the highway environment, and would not be an unexpected visual element. As a result, the lighting proposed by the project would not adversely affect nighttime views from public areas such as roads or recreation areas.

Project implementation would result in visual changes, as seen from public viewpoints, such as State Route 1 and some intersecting local streets. An increased visual scale of the highway facility would primarily be the result of the introduction of additional drainage structures, paved surfaces, traffic management system elements, and other roadside elements. While they would not be unexpected elements in the roadway environment, their increased size and contrasting appearance would make these otherwise visually neutral features potentially more noticeable and would contribute somewhat to the increased visual scale of the highway facility.

Although visual changes would occur as a result of this project, the same type of elements proposed with this project are seen elsewhere along the highway and are not, by themselves, inconsistent with the rural roadway character of the region or throughout the state. As a result, the proposed drainage structures, paved surfaces, traffic management system elements, and other roadside elements would be subordinate to the overall experience of traveling along the highway.

Avoidance, Minimization, and/or Mitigation Measures

The following minimization measures would avoid or minimize impacts on the visual environment.

VIS-1: Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be used.

VIS-2: Revegetate all disturbed areas with native plant species appropriate to each specific work location.

VIS-3: If tree removal is necessary at Reservation Road, then trees shall be replaced and maintained until established. The number and location of trees to be replanted would be determined by a District 5 Landscape Architect based on what would be feasible based on horticultural appropriateness, safety requirements, and constructability constraints.

VIS-4: Paving beyond the gore shall include aesthetic treatment to be determined and approved by a District 5 Landscape Architect.

VIS-5: If a retaining wall is necessary at Reservation Road, it shall include aesthetic treatment to be determined and approved by a District 5 Landscape Architect.

VIS-6: Guardrail posts should be stained or darkened to be visually compatible with selected rural settings, as determined and approved by a District 5 Landscape Architect.

VIS-7: Traffic management system elements aesthetic treatment, such as painting, to be determined and approved by a District 5 Landscape Architect.

VIS-8: Following construction, regrade and recontour all new construction staging areas and other temporary uses as necessary to match the surrounding pre-project topography.

VIS-9: All streetlights shall be directed downward and shall include cut-off lens fixtures such that no point source lighting is visible from nearby parcels.

2.1.2 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.

The project is located near prime farmland, unique farmland, and farmland of statewide importance, but additional right of way is not needed for this project. Therefore, the project would not convert any farmland under these designations to nonagricultural use or conflict with existing zoning for agricultural use or a Williamson Act contract.

Considering this information, the following significance determinations have been made.

Question—Would the project:	CEQA Significance Determinations for Agriculture and Forest Resources
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, 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

2.1.3 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.

Considering the information in the Air Quality, Noise, and Water Quality Technical Assessment Memorandum dated March 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Air Quality
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?	No 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?	No Impact

Affected Environment

The proposed project is in the North Central Coast Air Basin. This basin consists of Monterey, Santa Cruz, and San Benito counties. The Monterey Bay Air Resources District regulates air quality in the North Central Coast Air Basin. The North Central Coast Air Basin is considered in attainment for all federal ambient air quality standards and non-attainment for state ambient air quality standards for airborne particulate less than 10 microns in diameter (Particulate Matter 10).

Environmental Consequences

Since no additional lanes or capacity would be added to the highway, there would be no difference in long-term air emissions with or without the proposed project. However, there would be a short-term, temporary increase in air emissions and fugitive dust during the construction period. The use of equipment during project construction can generate fugitive dust that may have substantial temporary impacts on local air quality if large amounts of excavation, grinding, material transport, and subsequent fill operations are

necessary. Because minor earthwork is expected to be required, minimal dust generation would also be expected.

Due to the use of standard construction dust emission minimization practices and procedures, it is anticipated that project emissions of particulate matter (dust) and equipment emissions would be well within the daily thresholds of the Monterey Bay Air Resources District. Construction emissions are further calculated and discussed in the greenhouse gas section (Section 2.1.8).

Avoidance, Minimization, and/or Mitigation Measures

The following measure would avoid or minimize impacts on air quality.

AIR-1: To minimize dust emissions from the project, Section 14-9.02 (Air Pollution Control) of the 2023 Standard Specifications states that the contractor is responsible for complying with all local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017 (Public Contract Code Section 10231). Additionally, the project-level Stormwater Pollution Prevention Plan will address water pollution control measures that cross-correlate with standard dust emission minimization measures, such as covering soil stockpiles, watering haul roads, watering excavation and grading areas, and so on. By incorporating appropriate engineering design and stormwater Best Management Practices during construction, minimal, short-term air quality impacts are anticipated.

2.1.4 Biological Resources

Considering the information in the National Environment Study dated July 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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 National Oceanic and Atmospheric Administration Fisheries?	Less Than Significant Impact With Mitigation Incorporated

Question—Would the project:	CEQA Significance Determinations for Biological Resources
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?	No 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?	No 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

Affected Environment

The Area of Potential Impact, identified by the Caltrans Design Engineer, consists of potential disturbance areas for both permanent and temporary direct impacts and assumes the maximum amount of disturbance and/or impact associated with project construction, including cut and fill, staging, and access. The Biological Study Area is defined as the area that may be directly, indirectly, temporarily, or permanently impacted by construction and construction-related activities and as a buffer to encompass all indirect effects on surrounding natural areas. The Biological Study Area occurs along State Route 1 between the City of Marina and Castroville. The southern portion of the route runs next to Fort Ord Dunes State Park to the west, surrounded by dune habitat on each side of the existing route, while the northern portion of the route is surrounded by various agricultural fields. The size of the Biological Study Area is about 236.88 acres and includes the area encompassing the proposed project location and staging and access areas.

Most of the project limits are within the coastal zone (see Appendix B for the coastal policy analysis completed for this project).

The biological resources that have the potential to be affected by the proposed project are discussed in more detail below.

Natural Communities and Habitats of Concern

Northern Fore-dune: The southern half of the Biological Study Area is dominated by a ruderal ice plant mat mix and can be characterized as most similar to the Northern Fore-dune Herbaceous Semi-Natural Alliance. This community alliance is described as having less wind exposure than active dune habitat and limited groundwater availability. The natural community is commonly found along the northern coastline of California. Characteristic plant species include sand verbena species, sea rockets, and beach evening primrose. While these habitats are similar and described together, portions of the Biological Study Area contain areas of ice plant mats with minimal ruderal species.

Northern Fore-dune Scrub Mix: The northern portion of the Biological Study Area is dominated by a ruderal grassland sage mix and can be characterized as most similar to Northern Fore-dune Scrub Mix. This community alliance is described as fore-dune habitat types on stabilized back dune slopes consisting of scattered shrubs, subshrubs, and herbs. The natural community is commonly found along the northern coastline of California. Characteristic plant species include northern fore-dune species that are mixed with shrub species such as common Lancaster, California goldenbush, and beach blue lupine. This habitat is also mixed with ruderal, invasive species along the edges of the highway, including brome grasses, slim oats, and black mustard.

Riparian Scrub: Near the center of the Biological Study Area, the project area crosses over the Salinas River. The dominant vegetation in this area can be characterized as most similar to that of the Central Riparian Scrub Shrubland Alliance. This community alliance is described as being a low, dense, riparian forest. Characteristic plant species include Arroyo willow and Baccharis species.

Anthropogenic: A public county building is within the Biological Study Area near the Del Monte Boulevard Overcrossing. This area, which is disturbed and has minimal potential to support habitat for sensitive species, would not be impacted by the project.

Ruderal Disturbed: Ruderal/disturbed vegetation is also commonly found along the edges of State Route 1. These areas are dominated by weedy species such as brome grasses, slim oats, and black mustard. These areas are subjected to routine disturbance from vehicle and foot traffic and have minimal potential to support habitat for sensitive species.

Wetlands, Other Waters, and Riparian Areas

Within the project limits, the Salinas River is a U.S. Army Corps of Engineers-regulated other water. The river and its surrounding riparian habitat are also under the jurisdiction of the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the California Coastal Commission.

Special-Status Plant and Animal Species

The term special-status species refers to plants or animals that are federally or state listed as endangered, threatened, or rare species that are candidates or proposed for federal or state listing, and species considered special-concern species by federal or state agencies. There is potential for 21 special-status plant species and 19 special-status animal species to occur within the Biological Study Area and surrounding area.

The special-status plant and animal species that have the potential to be affected by the project are described in greater detail below:

Monterey Spineflower: Monterey Spineflower is a federally threatened, California Rare Plant Rank 1B.2 annual herb that is commonly found in coastal dune and sandy soil habitats. The plant is characterized as a low-growing angiosperm with white-to-pink flower coloration. Numerous individuals were seen next to the west shoulder of State Route 1 for the mile-long span between the Reservation Road Undercrossing and Lake Court Undercrossing.

The Biological Study Area also occurs within a federally designated critical habitat unit for the Monterey spineflower. This unit consists of about 881 acres; species were present at the time of listing and are currently present. This unit encompasses the area west of State Route 1 and just south of the mouth of the Salinas River to the City of Monterey.

Sandmat Manzanita: Sandmat Manzanita is a California Rare Plant Rank 1B.2 perennial evergreen shrub commonly found in coastal dune and sandy soil habitats. The plant is characterized as a low-growing angiosperm shrub with white-to-pink flower coloration. About six individuals were seen next to the spillway within the median 0.6 mile south of the Reservation Road Overcrossing.

Tidewater Goby: The tidewater goby is a federally endangered species and is considered a Species of Special Concern by the California Department of Fish and Wildlife. The species is endemic to coastal lagoons, estuaries, and backwater marshes in California. Common features of tidewater goby habitat include shallow water with little to no flow and fine sediment such as sand, mud, or muddy gravel.

No protocol tidewater goby surveys were conducted within the Salinas River for the project, and the species is assumed to have been wiped out from the area, with the most recent occurrence being in 1951, provided by the California Natural Diversity Database from the California Department of Fish and Wildlife.

The Biological Study Area also occurs within federally designated critical habitat for the tidewater goby. This unit consists of about 466 acres, with the first observation being in 1951 and the unit being listed in 2013. Although the unit is no longer considered to be currently occupied, it is considered essential for the species.

Smith's Blue Butterfly: The Smith's blue butterfly is a federally endangered insect. The species commonly inhabits coastal sand dunes and cliffs within chaparral areas along the coastlines in Monterey, Santa Cruz, and San Mateo counties. The life cycle for the species is annual, with individuals inhabiting only two host plant species throughout their lives: seacliff buckwheat and seaside buckwheat. These plant species are obligate host plants for larvae and provide a source of nectar for adults. The butterflies emerge in the late summer and early fall to mate and lay eggs within the host plants' flowers.

California Natural Diversity Database records show the north metapopulation of Smith's blue butterfly inhabiting the area as recently as 1987. The nearby Fort Ord Dunes State Park (North) population is presumed to still exist. Protocol Smith's blue butterfly surveys were conducted in June 2022. No Smith's blue butterflies were seen in the Biological Study Area during surveys for the project. However, suitable buckwheat habitat occurs within the Biological Study Area between the Lake Court Undercrossing and 1 mile north of the Reservation Road Undercrossing. Therefore, the presence of the Smith's blue butterfly is inferred within the Biological Study Area.

Western Bumblebee and Crotch's Bumblebee: The western bumblebee and Crotch's bumblebee are candidates for listing by the California Department of Fish and Wildlife under the California Endangered Species Act.

Western bumblebees have historically occurred throughout western North America, and the species has continued to decline since 1998. The areas that have shown the largest population decline are those with lower elevations in California, western Oregon, and western Washington.

Crotch's bumblebees have historically occurred throughout the western and interior portions of California and have declined by about 74.67 percent since 2013. Monterey County and other counties along the northwestern coastline of California have experienced the largest decline.

No bumblebees were seen in the Biological Study Area during general wildlife surveys for this project, and no protocol surveys were conducted. Suitable

nesting habitats may exist in marginal areas that contain small mammal burrows. However, few burrows were seen in the southern portion of the project area due to sandy soil conditions. The northern portion of the project area, with its grassland habitat, also contained a few small mammal burrows. The nearest California Natural Diversity Database occurrence is about 0.5 mile west of the Biological Study Area near the Salinas River in 1983. No California Natural Diversity Database occurrences for Crotch's bumblebee have been recorded within 3 miles of the Biological Study Area. Additional surveys may be conducted in areas where ground-disturbing activities are anticipated to take place.

Western Pond Turtle: The western pond turtle is considered a Species of Special Concern by the California Department of Fish and Wildlife. Western pond turtles have been present in most Pacific slope drainages between the Oregon and Mexican borders. Western pond turtles live where water persists year-round, in ponds along foothill streams or in broad washes near the coast. They may overwinter on land or in water, but they may remain active in water during the winter season. Western pond turtles may be active all year in warmer areas along the Central and Southern California Coast.

No focused western pond turtle surveys were conducted; however, no western pond turtles were seen in the Biological Study Area during general wildlife surveys for this project. The nearest California Natural Diversity Database occurrence is about 8.1 miles southeast of the Biological Study Area. Suitable aquatic and nesting habitat occurs within the Biological Study Area for western pond turtles along the Salinas River and its associated riparian areas.

California red-legged frog: The California red-legged frog is federally threatened and considered a Species of Special Concern by the California Department of Fish and Wildlife. The California red-legged frog historically ranged from Marin County southward to northern Baja California. Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining California red-legged frog populations within California. California red-legged frogs use a variety of areas, including aquatic, riparian, and upland habitats. The California red-legged frog uses both riparian and upland habitats for foraging, shelter, cover, and non-dispersal movement.

No protocol surveys were conducted for the California red-legged frog, and the species was not seen during general wildlife surveys. The closest California Natural Diversity Database occurrence record for the California red-legged frog is about 2.4 miles east of the Biological Study Area. While aquatic breeding and nonbreeding habitats exist at the Salinas River, no work activities would occur in or next to the river. While breeding habitat exists along the Salinas River, within the Biological Study Area, only nonbreeding aquatic habitat exists, and the Biological Study Area is outside of the typical 1-mile dispersal range of the nearby California Natural Diversity Database

occurrence. Marginal upland and dispersal habitat exists within the Biological Study Area; however, habitat within the Area of Potential Impact is not expected to be suitable due to the dry, sandy soils, proximity to suitable aquatic breeding habitat, lack of refugia and/or exposure, and ongoing disturbance from State Route 1.

Western Snowy Plover: The western snowy plover is a threatened species under the Federal Endangered Species Act. The Pacific Coast population is defined as those individuals that nest within 50 miles of the Pacific Ocean on the mainland coast, peninsulas, offshore islands, bays, estuaries, or rivers of the U.S. and Baja California, Mexico. Sand spits, dune-backed beaches, beaches at the creek and river mouths, and salt pans at lagoons and estuaries are the main coastal habitats for nesting.

No protocol surveys were conducted, and no western snowy plovers or nests were seen during general wildlife surveys of the Biological Study Area. The Biological Study Area occurs next to a federally designated critical habitat unit for the western snowy plover. Due to the presence of barriers, the Biological Study Area does not contain the appropriate physical or biological features to provide suitable nesting or non-nesting habitat for the species.

Burrowing owl, American badger, and Monterey shrew: Burrowing owl, American badger, and Monterey shrew are addressed here as a group because they have similar habitat requirements, project-related impacts, and avoidance and minimization measures.

The burrowing owl is considered a Species of Special Concern by the California Department of Fish and Wildlife. Burrowing owls live in grassland, shrubland, and desert habitats. The burrowing owl uses small mammal burrows for roosting and nesting cover and preys on insects, small mammals, reptiles, small birds, and carrion.

The American badger is considered a Species of Special Concern by the California Department of Fish and Wildlife. American badgers are found throughout most of the state and occur mostly in dry, open stages of shrub, forest, and herbaceous habitats. The species burrows in friable soils, often using previously occupied ground squirrel burrows.

The Monterey shrew is considered a Species of Special Concern by the California Department of Fish and Wildlife. Monterey shrews are found throughout Monterey, Santa Cruz, and San Benito counties. The species commonly burrows in friable soils within brackish water marshes.

Burrows meeting size criteria for burrowing owls and American badgers were not seen during general wildlife surveys. The existing burrows seen within sandy soil conditions are unlikely to support burrowing owls and American badgers due to the consistent size criteria required by the species. Monterey

shrews may occur next to the Salinas River; however, no burrows were seen. A qualified biologist evaluated existing burrows for the presence of scat, prey remains, and species-specific excavation markings. Of the few existing burrows observed within the Biological Study Area, no signs of burrowing owl, American badger, or Monterey shrew were observed. No burrows were observed in or near areas of anticipated ground disturbance.

Tricolored Blackbird and Other Nesting Birds: Nesting bird species are addressed here as a group because they have similar habitat requirements, project-related impacts, and avoidance and minimization measures. The nesting bird season for the Biological Study Area is considered to be February 15 to September 31.

The tricolored blackbird is a state-threatened species and native to California. While small nesting colonies exist in Oregon, Washington, Nevada, and Baja California, 99 percent of nesting colonies exist in California. Tricolored blackbirds are known to reside in California's Central Valley throughout the year and breed from March through August. The species forms the largest breeding colonies in North America, nesting in small to moderately sized wetland features.

Throughout the winter, tricolored blackbirds live in grasslands and agricultural fields with other blackbird species. In addition to the tricolored blackbird, numerous other nesting bird species protected by regulatory laws have the potential to nest in habitats within the Biological Study Area.

No tricolored blackbirds or bird nests were observed within the Biological Study Area during surveys. Potential nesting habitat for tricolored blackbirds occurs within riparian vegetation next to the Salinas River. Additionally, a 2008 California Natural Diversity Database record 0.1 mile east of the Reservation Road exit observed tricolored blackbird nests within the cattails of a small lagoon next to a residential area. Potential nesting habitat for other bird species occurs in trees, shrubs, and under bridges within the Biological Study Area.

Roosting Bats: Several species of bats may occur in the project Biological Study Area and could occupy various human-made structures within the Biological Study Area, with nocturnal foraging occurring up to 15 miles from roosting sites. Common species that may occur in the area include California myotis, little brown myotis, Yuma myotis, and big brown bats. These species typically give birth and congregate in maternal roosts to raise their young between February 15 and September 1.

The bridges at Lake Court, Reservation Road, post mile 87.7, and Del Monte Boulevard were surveyed for roosting bats and bat signs (such as guano, grease or urine stains, and prey remains) during the general wildlife survey efforts in 2022. No roosting bats or bat signs were observed within the

Biological Study Area. All bridges within the Biological Study Area contain crevices that could support marginal roosting habitat. However, it is unlikely that these features would support maternity roosts due to a lack of optimal roosting habitat, including long vertical crevices about 0.75 to 2 inches wide; dark, wind-sheltered areas with suitable temperatures; and areas away from anthropogenic disturbances and predator access.

Invasive Species

Executive Order 13112 defines invasive species as any species, including its seeds, eggs, spores, or other biological material capable of propagating that species that is not native to that ecosystem and whose introduction does or is likely to cause economic or environmental harm or harm to human health. Biological surveys identified 22 plant species in the Biological Study Area that are listed as invasive by the online California Invasive Plant Council Database. Of these identified plant species, two were rated as high invasiveness, 11 were rated as moderate invasiveness, and nine were observed with an invasiveness rating of “limited.”

Environmental Consequences

Natural Communities and Habitats of Concern

There are no sensitive natural communities within the Biological Study Area; therefore, there will be no permanent or temporary impacts on sensitive natural communities. Estimated permanent and temporary impacts are quantified in Table 2.1.

Impacts on sensitive habitats have been quantified based on estimated ground disturbances and disturbed vegetation. Permanent impacts to non-sensitive, ruderal areas will consist of extending guardrail past existing guardrail locations. Temporary impacts would consist of staging areas and access roads within non-sensitive, ruderal areas.

Ruderal/disturbed areas and ornamental vegetation are not considered sensitive natural communities and are not discussed further in this section.

The Biological Study Area does not occur within a known wildlife corridor, and therefore, no wildlife connectivity impacts are anticipated.

Wetlands, Other Waters, and Riparian Areas

The proposed project would not impact potential U.S. Army Corps of Engineers or Regional Water Quality Control Board jurisdictional other waters and wetlands, California Department of Fish and Wildlife jurisdictional areas, or California Coastal Commission single parameter wetlands within the Biological Study Areas.

Table 2.1 Summary of Potential Impacts on Jurisdictional Riparian Areas and Natural Communities and Habitats of Concern

Natural Community/Habitat	Permanent Impacts (Square Feet/Acres)	Temporary Impacts (Square Feet/Acres)
Seacliff buckwheat	0 square feet/0 acre	2,590 square feet/0.059 acre
Seaside buckwheat	0 square feet/0 acre	2,967 square feet/0.068 acre

Special-Status Plant and Animal Species

Monterey Spineflower and Sandmat Manzanita: Although Monterey spineflower and sandmat manzanita are located next to areas where ground-disturbing activities are expected, both species would be avoided. With the proposed avoidance and minimization measures below, the project is not expected to impact any special-status plant species.

As proposed, no impacts to the Monterey spineflower critical habitat are anticipated. The Federal Endangered Species Act Section 7 Effects Determination states that the proposed project will have no effect on these species or critical habitat for the Monterey spineflower.

Tidewater Goby: No work activities would occur within or next to the Salinas River; therefore, impacts to tidewater goby and its critical habitat are not anticipated.

As proposed, no impacts to tidewater goby critical habitat are anticipated. The Federal Endangered Species Act Section 7 Effects Determination states that the proposed project will have no effect on the species or its critical habitat.

Smith’s Blue Butterfly: Estimated impacts on Smith’s blue butterfly habitat are quantified in Table 2.1. Project construction would impact about 0.127 acre of seacliff and seaside buckwheat habitat. Impacts on buckwheat species would result during guardrail system upgrades and culvert restoration. Both activities are needed to comply with upgraded safety standards and to protect the embankment and roadway from potential slope failure.

Mitigation measures involving the replanting and relocation of seacliff buckwheat and seaside buckwheat will occur in locations conducive to the establishment and long-term survival. Proposed replanting locations will be as close as possible to the original site of removal, outside of anticipated future activities or disturbances. The potential need to capture and relocate Smith’s blue butterflies would subject individuals to stress that could result in adverse effects. Injury or mortality could occur via accidental crushing by worker foot traffic or construction equipment.

The potential for these impacts is anticipated to be low due to no observations of the Smith’s blue butterfly species within the Biological Study Area during

recent protocol surveys. However, this could change over time as these species could potentially expand populations or colonize marginal habitats found within the Biological Study Area. The Federal Endangered Species Act Effects Determination states that the project may affect and is likely to adversely affect Smith's blue butterfly.

Caltrans anticipates the proposed project will qualify for the Federal Endangered Species Act incidental take coverage under the Programmatic Biological Opinion for Projects Funded or Approved under the Federal Highway Administration Federal Aid Program.

Western Bumblebee and Crotch's Bumblebee: The potential for impacts on the western bumblebee and Crotch's bumblebee is anticipated to be low due to no observations of the species within the Biological Study Area during surveys. However, this could change over time, and these species could potentially expand populations. If present, project construction could result in the injury or mortality of bumblebees via accidental crushing by worker foot traffic or construction equipment. Activities could also result in indirect impacts on western bumblebees via the removal of potential pollinator vegetation and construction equipment collapsing potential unoccupied burrows. The potential need to capture and relocate these species would subject these animals to stresses that could result in adverse effects.

With the exception of guardrail upgrades, shoulder backing, and lighting relocation, work activities would take place on the existing roadway, with material and equipment storage occurring in previously disturbed and ruderal areas. Off-highway work would occur next to the existing highway within low-quality, ruderal habitat subject to routine disturbance with limited ability to support sensitive species. While the project location is within the historical ranges for both species, it is outside the species' current ranges. Therefore, the project is not anticipated to impact the western bumblebee or Crotch's bumblebee.

Western Pond Turtle: The potential for impacts resulting from worker foot traffic or construction equipment is anticipated to be low due to no work occurring within the Salinas River or its associated riparian habitat and no observations of the species within the Biological Study Area during surveys. However, the presence of this species may change through time by potentially expanding populations or colonizing within the streams and upland habitat in the Biological Study Area. If required to move any individuals out of harm's way, the potential need to capture and relocate these species would subject these animals to stresses that could result in adverse effects.

California red-legged frog: The potential for project impacts on the California red-legged frog is anticipated to be low due to no observations of the species within the Biological Study Area during surveys, proximity to suitable breeding habitat, a lack of occurrences within the project area, and poor habitat quality

within the Biological Study Area. Further, avoidance and minimization measures would be implemented to ensure there are no impacts on the California red-legged frog.

The Federal Endangered Species Act Section 7 Effects Determination is that the proposed project will have no effect on the California red-legged frog.

Western Snowy Plover: The Biological Study Area contains small amounts of dune and sandy beach habitat; these areas occur on opposing dune hillsides, away from the shoreline, and near the roadway. Although the Biological Study Area occurs next to a federally designated critical habitat unit for western snowy plovers, no impacts to this unit are anticipated. Construction activities would not result in additional noise impacts on the species, and work would not occur in suitable nesting or non-nesting habitats. Due to the proximity of this project to the western snowy plover's critical habitat, the measure described below will be implemented to completely avoid impacts on the western snowy plover. The Federal Endangered Species Act Section 7 Effects Determination is that the proposed project will have no effect on western snowy plovers.

Burrowing Owl, American Badger, and Monterey Shrew: The disturbance of dirt and vegetation could directly impact the species and/or their burrows. Indirect impacts could also result from noise and disturbance associated with construction, which could alter foraging and/or nesting behaviors. With the implementation of avoidance and minimization measures, impacts on burrowing owls, American badgers, and Monterey shrews are expected to be less than significant.

Tricolored Blackbird and Other Nesting Birds: The removal of vegetation could directly impact active bird nests and any eggs or young residing in nests. Indirect impacts could also result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. The implementation of avoidance and minimization measures, such as appropriate timing of vegetation removal, preconstruction surveys, and exclusion zones, would reduce the potential for impacts on nesting bird species.

Roosting Bats: Although no bat roosts or bat roost signs were observed during surveys, there is a marginal potential that bats could establish new roosts under the existing bridge and/or in trees within the Area of Potential Impact. If bats were to be present during construction, indirect impacts could result from noise and disturbance associated with construction, which could alter roosting behaviors. The implementation of pre-activity surveys and exclusion zones (if necessary) will reduce the potential for impacts on roosting bat species. Direct impacts are not anticipated because no work is scoped to occur below the bridge deck or on structures containing potential roosting habitat, and no trees are scoped to be removed. Avoidance and

minimization measures are proposed to avoid direct and indirect impacts on the species.

Invasive Species

Ground disturbance and other aspects of project construction (e.g., erosion control, landscaping) could potentially spread or introduce invasive species within the Biological Study Area. The distribution of most invasive plant species is sparsely scattered throughout the Biological Study Area and most common in ruderal/disturbed areas along the edges of State Route 1.

However, the spread of invasive species is anticipated to be low and would be managed with the implementation of the avoidance and minimization measures listed below.

Avoidance, Minimization, and/or Mitigation Measures

The measures listed below would reduce potential impacts on biological resources. Mitigation measures are labeled as such, and the remaining measures are avoidance or minimization measures.

The measures have been organized by the primary resource or species they are designed to protect, but they may apply to several biological resources.

It should also be noted that the Water Pollution Control Program and many of the Best Management Practices and standard specifications outlined in Section 1.6 would avoid and minimize impacts on biological resources.

Wetlands, Other Waters, and Riparian Areas

The following avoidance and minimization measures would be implemented to ensure no impacts on these jurisdictional areas would result from the project:

BIO-1: Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed, as appropriate, around jurisdictional waters, coastal zone Environmentally Sensitive Habitat Areas, and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-2: During construction, all project-related hazardous material spills within the project site shall be cleaned up immediately. Readily accessible spill prevention and cleanup materials shall be kept by the contractor on-site at all times during construction.

BIO-3: During construction, erosion control measures shall be implemented. Silt fencing, fiber rolls, and barriers shall be installed as needed between the project site and jurisdictional other waters and riparian habitat. At a minimum,

erosion controls shall be maintained by the contractor on a daily basis throughout the construction period.

BIO-4: During construction, the staging areas shall conform to Best Management Practices applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles shall be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

Special-Status Plant Species

BIO-5: All areas containing any listed plant species shall be delineated on the project's plan sheets as Environmentally Sensitive Areas. These areas shall be marked with highly visible construction fencing and will be off-limits to construction equipment and personnel.

BIO-6: To avoid impacts to any vegetation, all staging, equipment, and storage areas shall occur in existing pullouts or at paved locations that have been cleared by a Caltrans biologist.

BIO-7: Preconstruction surveys shall be conducted by a qualified biologist prior to any ground-disturbing activities to confirm the presence or absence of special-status plant species.

Smith's Blue Butterfly

The following measures are the applicable measures from the Programmatic Biological Opinion for Smith's Blue Butterfly that will be implemented for this project:

BIO-8: Caltrans will ensure that all construction activities follow well-defined procedures to avoid effects on the Smith's blue butterfly.

BIO-9: Caltrans will prohibit mowing and broadcast spraying of herbicide in stands of buckwheat. Within areas that contain buckwheat, control of invasive weeds, which is beneficial to buckwheat, will be achieved by spot spraying of herbicide and/or hand clearing.

BIO-10: Caltrans will ensure that only Service-approved biologists will participate in the capture, handling, and monitoring of the Smith's blue butterfly in all of its life stages and the handling of buckwheat plants.

BIO-11: Caltrans will ensure that ground disturbance for maintenance or project activities will not begin within stands of buckwheat until a Service-approved biologist is on-site.

BIO-12: Service-approved biologists will verify that the proposed work activity within stands of buckwheat meets all criteria established for the use of this biological opinion.

BIO-13: For maintenance work or project activity within stands of buckwheat, a Service-approved biologist will survey the work site no more than 30 days before the start of ground disturbance. If any life stage of the Smith's blue butterfly or its host plants, seacliff buckwheat and seaside buckwheat, is found and is likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to relocate seacliff buckwheat plants, duff, and/or soil from the site before work activities begin. The seacliff buckwheat and seaside buckwheat plants, duff, and/or soil will be hand removed and placed as close as possible to, but not on, living seacliff buckwheat plants. The Service-approved biologist will relocate the seacliff buckwheat plants, duff, and/or soil the shortest distance possible to a location that contains suitable habitat and will not be affected by project activities. The Service-approved biologist will maintain detailed records of the number of seacliff buckwheat and seaside buckwheat plants that are moved. Any seeds collected for replanting purposes will be sourced locally from the same metapopulation area.

BIO-14: Before any maintenance or project activity work begins within stands of buckwheat, a Service-approved biologist will provide training to all field personnel. At a minimum, the training will include a description of the Smith's blue butterfly and its habitat, the specific measures that are being implemented to conserve the Smith's blue butterfly, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BIO-15: A Service-approved biologist will be present at the work site for maintenance or project activity within stands of buckwheat until all Smith's blue butterflies, seacliff buckwheat, and seaside buckwheat plants that are at risk due to project activities have been removed, workers have been instructed, and disturbance to habitat has been completed. After this time, Caltrans will designate a person to monitor on-site compliance with all minimization measures. The Service-approved biologist will ensure that this monitor receives the training outlined and assists in the identification of the Smith's blue butterfly and its host plant. If the monitor or the Service-approved biologist recommends that work be stopped because the Smith's blue butterfly or its host plants will be affected to a degree that exceeds the levels anticipated by Caltrans and the Service during a review of the proposed action, they will notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer will either resolve the situation by eliminating the unanticipated effect(s) immediately or require that all actions causing these effects be stopped. If work is stopped, the Service will be notified as soon as is reasonably possible.

Mitigation Measure BIO-16: An assemblage of native species will be used for the revegetation of project sites. Seacliff buckwheat seeds or plants will

only be placed outside the vegetation control areas. The spread of invasive weeds during revegetation efforts will be controlled according to the Vegetation Management Guidelines developed as part of the Big Sur Coast Highway Management Plan.

BIO-17: The number of access routes, the size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Areas will be established to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact on Smith's blue butterfly and seacliff buckwheat.

BIO-18: Caltrans will ensure that Best Management Practices are implemented according to the most current approved guidelines to control erosion and sedimentation during and after project implementation. Under the California Interagency Noxious Weed Free Forage and Mulch Program, California is taking steps to make noxious weed-free hay and straw widely available. Under this program, weed-free hay and straw bales will be used for erosion control measures when they become available.

BIO-19: Caltrans shall ensure that an annual report is completed and provided to the U.S. Fish and Wildlife Service following the template provided with the Programmatic Biological Opinion.

Western Pond Turtle

BIO-20: Prior to construction, a biologist determined qualified by Caltrans shall survey the Area of Potential Impact and, if present, capture and relocate any western pond turtles to suitable habitat outside of the Area of Potential Impact.

BIO-21: Observations of western pond turtles, other Species of Special Concern, and special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

California Red-Legged Frog

BIO-22: During project activities, all trash that may attract predators or scavengers shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

BIO-23: If a California red-legged frog is found, work activities shall stop immediately within 100 feet of the frog, and agency consultation shall be initiated.

BIO-24: Before work activity begins, a qualified biologist will provide training to all field personnel. At a minimum, the training will include a description of

the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the species, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

Western Snowy Plover

BIO-25: If a western snowy plover is observed within 100 feet of the Area of Potential Impact during construction, a qualified biologist shall implement an exclusion zone, and work shall be avoided within the exclusion zone until the snowy plover is located greater than 100 feet from project-related disturbances. If an active western snowy plover nest is observed within 100 feet of the Area of Potential Impact, all project activities shall stop immediately within 500 feet, and technical assistance with the U.S. Fish and Wildlife Service shall be initiated.

Burrowing Owl, American Badger, and Monterey Shrew

BIO-26: A preconstruction survey shall be conducted no less than 14 days and no more than 30 days prior to any construction activities or any project activity likely to impact the burrowing owl, American badger, or Monterey shrew. The status of all dens will be determined and mapped. Known dens, if found occurring within the footprint of the activity, shall be monitored for three days with tracking medium and/or cameras to determine the current use. If Monterey shrew, burrowing owl, and/or American badger activity is observed during this period, the den shall be monitored for at least five consecutive days from the time of the observation to allow any resident animal to move to another den during its normal activity.

BIO-27: Prior to groundbreaking, a qualified biologist shall conduct an environmental education and training session for all construction personnel.

BIO-28: No canine or feline pets or firearms (except those associated with law enforcement officers and security personnel) shall be permitted on construction sites to avoid harassing, killing, or injuring burrowing owls, American badgers, and/or Monterey shrews.

BIO-29: Maintenance and construction excavations more than 2 feet deep shall be covered (e.g., with plywood, sturdy plastic, steel plates, or equivalent), filled at the end of each working day, or have earthen escape ramps no greater than 200 feet apart to prevent trapping sensitive species.

BIO-30: All construction pipes, culverts, or similar structures with a diameter of 1 inch or greater stored in the construction site overnight will be thoroughly inspected for Monterey shrews prior to being buried, capped, or otherwise used or moved. All construction pipes, culverts, or similar structures with a diameter of 3 inches or greater stored on the construction site overnight will be thoroughly inspected for American badgers prior to being buried, capped,

or otherwise used or moved. If a Monterey shrew, burrowing owl, or American badger is discovered inside a pipe, the pipe shall not be moved until the species moves during its normal activity. If the identified species is in direct harm's way, the pipe may be moved to a safe location one time under the direct supervision of a qualified biologist.

Tricolored Blackbird and Other Nesting Birds

BIO-31: Prior to construction, vegetation removal shall be scheduled to occur from October 1 to February 13, outside of the typical nesting bird season, if possible, to avoid potential impacts on nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat, a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans no more than three days prior to construction. If an active nest is found, an appropriate buffer based on the habits and needs of the species shall be established. The buffer area shall be avoided until a qualified biologist has determined that juveniles have fledged.

Roosting Bats

BIO-32: Night work occurring near suitable structures shall be scheduled to occur from September 2 to February 14, outside of the typical bat maternity roosting season, if possible, to avoid potential impacts on roosting bats.

BIO-33: If construction activities are proposed to occur within 100 feet of potential habitat during the bat maternity roosting season (February 15 to September 1), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 days prior to construction. If an active bat roost is found, an appropriate buffer shall be established based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has stopped.

Invasive Species

BIO-34: During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

BIO-35: Only clean fill shall be imported. When practicable, invasive exotic plants on the project site shall be removed and properly disposed of. All invasive vegetation removed from the construction site shall be taken to a landfill to prevent the spread of invasive species. If the soil from weedy areas must be removed off-site, the top 6 inches containing the seed layer in areas with weedy species shall be disposed of at a landfill. Inclusion of any species that occurs on the California Invasive Plant Council's Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project shall be avoided.

BIO-36: To minimize the introduction of invasive plant species, all vehicles, machinery, and equipment shall be in a clean and soil-free condition before entering the project limits. Construction equipment shall be certified as “weed-free” by Caltrans before entering the construction site.

2.1.5 Cultural Resources

There are no historic properties located within the project area of potential effects. The culvert system proposed for repair at post mile R86.5 contains metal grate drainage inlets and flared concrete outlets that are not historic. There are 13 bridges located within the project's post mile limits. All have been previously determined to not be eligible for listing in the National Register of Historic Places or the California Register of Historical Resources. All of these bridges were constructed in 1976 and are not yet 50 years old.

A review of the project description, mapping, historical imagery, as-builts, and previous historical reports confirmed that the project does not have the potential to affect any historic-period built-environment resources directly or indirectly. A review of the project description, mapping, as-builts, assessment of culvert locations, and previous archaeological reports also confirmed that the project does not have the potential to affect historic or prehistoric cultural resources.

Based on these reviews and findings, it has been determined that the project does not have the potential to affect cultural resources.

Considering the information in the Cultural Resources Screened Undertaking Memo dated February 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Cultural Resources
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	No Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	No Impact

2.1.6 Energy

Caltrans incorporates energy efficiency, conservation, and climate change measures into transportation planning, project development, design, operations, and maintenance of transportation facilities, fleets, buildings, and

equipment to minimize the use of fuel supplies and energy sources and reduce greenhouse gas emissions. The project is not capacity increasing, and, therefore, the operation would not increase energy usage.

Energy usage would be required during construction but would be minimized whenever possible through the recycling of materials and the implementation of greenhouse gas reduction strategies. Replacing or repairing the culverts is needed to prevent the undermining of the roadway and maintain the safety and reliability of the State Route 1 corridor.

The following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Energy
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

2.1.7 Geology and Soils

Considering the information in the Geologic Hazards Report dated July 2023, along with the Paleontology Review Memorandum dated August 2023, the following significance determinations have been made:

Question—Would the project:	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: <ul style="list-style-type: none"> 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?	Less Than Significant Impact
iv) Landslides?	No Impact

Question—Would the project:	CEQA Significance Determinations for Geology and Soils
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	Less Than Significant Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	No 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 wastewater?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

Affected Environment

The southern portion of the project limits is located within the Reliz Fault Zone, which may be potentially active according to archived documentation on the California Geological Survey’s Alquist Priolo Site Investigation Reports online database and the U.S. Geological Survey’s online Quarternary Fault and Fold Database of the U.S. Another risk of seismic ground shaking within the project limits would be due to any major events occurring on the Monterey Bay-Tularcitos Fault, about 6 miles southwest of the site. The most active fault zone, the San Andreas Fault, is about 12 to 18 miles east of the project limits.

The California Geological Survey records and the U.S. Geological Survey Quarternary Fault and Fold database indicate the proposed improvements are not within an Alquist Priolo Earthquake Fault Zone nor within 1,000 feet of any mapped fault that is Holocene (up to 11,000 years old) or younger. Therefore, the proposed improvements are not considered susceptible to surface fault rupture hazards per Caltrans standards.

The Geologic Hazards Map Geographic Information Systems Application from Monterey County’s website contains liquefaction data along State Route 1. The Geologic Hazards Map indicates certain locations that are susceptible to liquefaction, as shown in Table 2.2. Monterey County’s online Geologic

Hazards Map also provides ratings of soil erosion for sections of State Route 1, which can be found in Table 2.3.

Table 2.2 Summary of Liquefaction Potential

Post Mile Start	Post Mile End	Liquefaction Potential
85.10	85.59	Low
85.59	86.31	Moderate
86.31	88.2	Low
88.2	88.62	High
88.62	89.1	Low
89.1	90.98	Moderate to High

Table 2.3 Summary of Soil Erosion Potential

Post Mile Start	Post Mile End	Soil Erosion Potential
85.10	85.59	Moderate
85.59	86.31	High
86.31	88.2	Moderate
88.2	88.62	Low
88.62	89.1	Moderate
89.1	90.98	Low

Upon review of the geologic maps available on the U.S. Geologic Survey's database, all proposed improvements in the project limits are predominantly situated on structural fill underlaid with old Quaternary dune sand deposits in the southern half of the project limits and stream fill alluvium in the northern half. Both geologic units are relatively stable but are susceptible to liquefaction, as previously discussed.

State Route 1 within the project limits is predominantly supported by structural fill per Caltrans standard specifications. Unified Soil Classification data from the U.S. Department of Agriculture's soil survey database show the project limits have a minor amount of high plasticity surficial clays but may not pose substantial risks to life or property considering the proposed improvements. Also, based on the U.S. Department of Agriculture's soil survey database, the soil for the entire project area on State Route 1 is very limited for the use of

septic tanks and other alternative wastewater disposal systems. A small section within the project limits is identified as not limited.

The alignment of State Route 1 throughout the project limits is mostly on gently sloping terrain with minimal landslide risk. According to the California Geologic Surveys Landslide Inventory Database and the Geologic Hazards Map Application from Monterey County’s Geographic Information Systems Department, landslide hazards are low. Both seismic and/or heavy rainfall events could contribute to landslide hazards at this location.

Environmental Consequences

While the project has areas rated as high risk for liquefaction and soil erosion potential, this project is not expected to further exacerbate these risks and would be designed to account for soil conditions. Proposed work at these spot locations would include guardrail replacement, asphalt concrete spillway replacement, paving beyond gore areas, and pavement preservation via cold planing or overlaying.

Since all work would be taking place in areas previously disturbed, there is no probability of encountering paleontological resources, and no impacts are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are proposed.

2.1.8 Greenhouse Gas Emissions

Considering the information in the Climate Change Technical Report dated October 2023 and the Air Quality, Greenhouse Gas, Noise, and Water Quality Memorandum dated March 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Greenhouse Gas Emissions
a) Generate greenhouse gas 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 greenhouse gases?	Less Than Significant Impact

Affected Environment

A greenhouse gas emissions inventory estimates the amount of greenhouse gases discharged into the atmosphere by specific sources over a period of

time, such as a calendar year. Tracking annual greenhouse gas emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. The U.S. Environmental Protection Agency is responsible for documenting greenhouse gas emissions nationwide, and the California Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.4. Cities and other local jurisdictions may also conduct local greenhouse gas inventories to inform their greenhouse gas reduction or climate action plans.

The California Air Resources Board sets regional greenhouse gas reduction targets for California's 18 Metropolitan Planning Organizations 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. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels.

The applicable Metropolitan Planning Organization for the proposed project location is the Association of Monterey Bay Area Governments. The Association of Monterey Bay Area Governments' Metropolitan Transportation Plan/Sustainable Communities Strategy for the project area is the "2045 Metropolitan Transportation Plan/Sustainable Communities Strategy: Moving Forward." Implementation of the plan and strategy is anticipated to achieve a 6 percent per capita reduction by 2035. The proposed project, however, is not included in the strategy.

The regional transportation planning agency for the proposed project is the Transportation Agency for Monterey County. The Transportation Agency for Monterey County's 2022 Regional Transportation Plan presents goals, policy objectives, and performance measures. Notable goals and policies relevant to transportation projects include:

- Goal 3: Environmental Stewardship – Protect and Enhance the County's Built and Natural Environment.
- Policy 3.1: Reduce greenhouse gas emissions consistent with regional targets.

The Open Space and Conservation Element of the Monterey County 2010 General Plan, amended in 2020, contains numerous air quality goals and policies to reduce greenhouse gas emissions and vehicle miles traveled. Notable goals and policies relevant to transportation projects include:

- Goal OS-10: Provide for the protection and enhancement of Monterey County's air quality without constraining routine and ongoing agricultural activities.

- Policy OS-10.2: Mass transit, bicycles, pedestrian modes of transportation, and other transportation alternatives to automobiles shall be encouraged.
- Policy OS-10.9: The County of Monterey shall require that future developments implement applicable Monterey Bay Unified Air Pollution Control District control measures. Applicants for discretionary projects shall work with the Monterey Bay Unified Air Pollution Control District to incorporate feasible measures that assure that health-based standards for diesel particulate emissions are met. The County of Monterey will require that future construction operate and implement the Monterey Bay Unified Air Pollution Control District's control measures for Particulate Matter 10 to ensure that construction-related Particulate Matter 10 emissions do not exceed the Monterey Bay Unified Air Pollution Control District's daily threshold for Particulate Matter 10. The County shall implement the Monterey Bay Unified Air Pollution Control District's measures to address off-road mobile source and heavy-duty equipment emissions as conditions of approval for future development to ensure that construction-related nitric oxide emissions from non-typical construction equipment do not exceed the Monterey Bay Unified Air Pollution Control District's daily threshold for nitric oxide.
- OS-10.14: The County of Monterey shall require that construction contracts be given to those contractors who show evidence of the use of soot traps, ultra-low sulfur fuels, and other diesel engine emissions upgrades that reduce PM10 emissions to less than 50 percent of the statewide PM10 emissions average for comparable equipment.
- OS-10.15: Within 12 months of the adoption of the general plan, the county shall quantify the current and projected (2020) greenhouse gas emissions associated with county operations and adopt a greenhouse gas reduction plan for county operations. The goal of the plan shall be to reduce greenhouse gas emissions associated with county operations by at least 15 percent less than 2005 emission levels. Potential elements of the county operations greenhouse gas reduction plan shall include, but are not limited to, the following measures:
 - An energy tracking and management system; energy-efficient lighting; a lights-out-at-night policy; occupancy sensors; heating, cooling, and ventilation system retrofits; ENERGY STAR appliances; green or reflective roofing; improved water pumping energy efficiency; central irrigation control system; energy-efficient vending machines; preference for recycled materials in purchasing; use of low- or zero-emission vehicles and equipment; recycling of construction materials in new county construction; solar roofs;
 - Conversion of fleets, as feasible, to;

- Electric vehicles, ultra-low-emission vehicles, methanol fleet vehicles, liquid propane gas fleet vehicles, or compressed natural gas fleet vehicles.

Environmental Consequences

Operational Emissions

The purpose of the proposed project is to preserve and extend the service life of existing pavement and facilities in Monterey County; the project would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational greenhouse gas emissions. Because the project would not increase the number of travel lanes on State Route 1, no increase in vehicle miles traveled would occur. While some greenhouse gas emissions during the construction period would be unavoidable, no increase in operational greenhouse gas emissions is expected.

Construction Emissions

Construction greenhouse gas emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions would 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.

The use of long-life pavement, improved traffic management plans, and changes in materials can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction is expected to last for about 122 days. Construction-generated greenhouse gas emissions were quantified based on project-specific construction data using the Caltrans Construction Emissions Tool, which largely models the emissions from construction equipment. Greenhouse gas emissions would total about 134 tons of carbon dioxide equivalent during this estimated 122-day construction period. Carbon dioxide equivalent is a measure used to compare emissions from various greenhouse gases based on their global warming potential. Calculating the carbon dioxide equivalent includes converting the emissions of other gases to the equivalent amount of carbon dioxide with the same global warming potential and then totaling the emissions together. For this project, the carbon dioxide equivalent calculation considers carbon dioxide and the converted equivalent amounts of methane, nitrous oxide, and hydrofluorocarbons. Note that this estimate is based on assumptions made during the environmental planning phase of the project and is considered a “ballpark” estimate of carbon dioxide equivalent emissions, relying on limited data inputs and default modeling. In addition to construction emissions, it should be noted that traffic delays during construction may result in increased greenhouse gas emissions from vehicles

and that the production and processing of construction materials such as concrete would also produce emissions.

All construction contracts include Caltrans Standard Specifications related to air quality. Sections 7-1.02A and 7-1.02C, Emissions Reduction, require 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, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce greenhouse gas emissions. Additionally, it should be noted that some construction emissions would be offset by fewer maintenance activities. Currently, maintenance needs to visit sites routinely to check on the failed or currently failing drainage systems. After project construction, there would be longer intervals between maintenance and rehabilitation activities.

While the project will result in greenhouse gas emissions during construction, it is not expected to increase operational greenhouse gas emissions. The project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With the implementation of construction greenhouse gas reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. These measures are outlined in the following section.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would be implemented in the project to reduce greenhouse gas emissions and potential climate change impacts from the project related to construction activities:

GHG-1: To the greatest extent possible, schedule truck trips outside of peak morning and evening commute hours.

GHG-2: For improved fuel efficiency from construction equipment:

- Maintain equipment in proper tune and working condition.
- Use the right-sized equipment for the job.
- Use equipment with newer technologies when feasible.

GHG-3: Earthwork Balance: Reduce the need for transport of earthen materials by balancing cut and fill quantities.

GHG-4: Supplement existing construction environmental training with information on methods to reduce greenhouse gas emissions related to construction.

GHG-5: To the greatest extent possible, salvage rebar from demolished concrete and process waste to create usable fill.

GHG-6: To the greatest extent possible, maximize the use of recycled materials.

GHG-7: To the greatest extent possible, reduce construction waste. For example, reusing or recycling construction and demolition waste reduces the consumption of raw materials, reduces waste and transportation to landfills, and saves costs.

GHG-8: To the greatest extent possible, use recycled water or reduce consumption of potable water for construction.

GHG-9: Select pavement materials that lower the rolling resistance of highway surfaces as much as possible while still maintaining design and safety standards.

2.1.9 Hazards and Hazardous Materials

Due to the type of work proposed, there are no hazardous waste sites or businesses commonly associated with hazardous waste generation that would have the potential to impact this type of project. There are underground storage tank closed cases next to the project limits. Naturally occurring asbestos would not be an issue on this project because it does not occur in the project area. The project would not impact any structures or facilities that would warrant an inspection for asbestos-containing material or lead-containing paint and, therefore, would not be an issue on this project.

Potential issues related to hazardous waste and materials that may be encountered during project construction include treated wood waste, aerially deposited lead-contaminated soil, and yellow thermoplastic or traffic striping. Each of these issues is routinely encountered on Caltrans construction projects and can be addressed with the implementation of Standard Special Provisions that have been developed for the management and disposal of these materials. The project hazardous waste specialist will work with the project design team to ensure the appropriate Standard Special Provisions are included in the construction contract.

For the management of aerially deposited lead-contaminated soils, once more details about the limits of project earthwork are known during the project design phase, a preliminary site investigation will be completed, if needed, to investigate the nature and extent of aerially deposited lead-contaminated soil

within the project limits. The Standard Special Provision for the management of aerially deposited lead-contaminated soil will be developed based on the results of the study.

With the implementation of Caltrans' Best Management Practices, Standard Specifications, and Standard Special Provisions for the management and disposal of routine hazardous waste issues, the proposed project would not create a substantial hazard to the public or environment.

The project is along a rural highway with few public services aside from recreational opportunities. There are no schools or airports within 0.25 mile and 2 miles, respectively, of the project. State Route 1 is listed as a primary evacuation route in the North County Region Evacuation Guide. However, the traffic management plan would account for emergency evacuations, and therefore, the evacuation plan would not be impaired. The project would also not change the fire risk in the area.

Considering this information and the information in the Hazardous Waste Technical Memorandum dated August 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No 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?	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	No 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

Question—Would the project:	CEQA Significance Determinations for Hazards and Hazardous Materials
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

2.1.10 Hydrology and Water Quality

The receiving water bodies in the vicinity of the project limits are the Salinas River and the Salinas River Lagoon. The proposed project has the potential to directly discharge stormwater within the project limits into one or both of these receiving water bodies. This project does not involve substantial excavation or earthwork activities that would cause or exacerbate existing turbidity conditions. By incorporating appropriate engineering design and robust stormwater Best Management Practices during construction, minimal, short-term water quality impacts are anticipated. Additionally, the project contractor will prepare a site-specific Water Pollution Control Plan approved by Caltrans. Therefore, the project would not result in significant, long-term impacts on water quality.

The Salinas River Floodplain stretches from southern San Luis Obispo County through the Salinas Valley and to Monterey Bay near the City of Marina. The Salinas River floodway is designated within the project limits. The proposed project does not alter the flood source or expose residences, buildings, or crops to flooding, and the risk to life or property remains unchanged. The conclusion is that the proposed project would not raise water surface elevations within the existing floodplains or floodways.

Considering the information in the Air Quality, Noise, and Water Quality Technical Assessment dated March 2023, along with the Location Hydraulics Study dated June 2023, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Hydrology and Water Quality
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface water or groundwater quality?	No 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 onsite or offsite;	No Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	No 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	No 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

2.1.11 Land Use and Planning

The project would not change the location, function, or capacity of State Route 1 and would not physically divide an established community. The project would not conflict with the Monterey County General Plan, Monterey County’s North County Land Use Plan, the City of Marina’s Land Use Plan, or any other policy or regulation meant to avoid or mitigate an environmental

effect. See Appendix B for the coastal policy analysis completed for this project.

Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Land Use and Planning
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

2.1.12 Mineral Resources

Given that the project is limited to repairing or replacing existing facilities, the project would not involve the removal or extraction of mineral resources, and therefore, there is no potential for the loss of valuable mineral resources.

Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Mineral Resources
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact
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

2.1.13 Noise

Considering the information in the Air Quality, Greenhouse Gas, Noise, and Water Quality Technical Memorandum dated March 2023, the following significance determinations have been made:

Question—Would the project result in:	CEQA Significance Determinations for Noise
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?	Less Than Significant 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 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

Affected Environment

The project limits span a length of about 6 miles. From post miles R85.1 to R87.0, the land to the east of State Route 1 is fairly well developed with single-family homes, while on the west, Marina State Beach and the Pacific Ocean are present. From post miles R87.0 to R90.98, the land on either side of State Route 1 consists of farm and agricultural use, with no residential structure located within this portion of the project limits.

Environmental Consequences

The project would be considered a Type 3 project since no capacity would be added to the highway, no significant change in the highway profile is expected, and local noise levels are assumed to be the same after the project as they were before. Long-term noise abatement measures are not expected with this project.

Local noise levels in the vicinity of construction will inevitably experience a short-term increase due to construction activities. The amount of construction noise will vary with the particular activities and associated models and types of equipment used by the contractor. Caltrans policy states that from 9:00 p.m. to 6:00 a.m., normal construction equipment should not emit noise levels greater than 86 A-weighted decibels at 50 feet from the source. Potential impacts at any given sensitive receptor location are expected to be very minimal and short term.

Avoidance, Minimization, and/or Noise Abatement Measures

The following avoidance and minimization measures would further reduce the potential for impacts on local noise levels.

NOISE-1: Notify the public in advance of the construction schedule when construction noise and upcoming construction activities likely to produce an adverse noise environment are expected. This notice shall be given two weeks in advance. A notice should be published in local news media of the dates and duration of the proposed construction activity. The District 5 Public Information Office posts notice of the proposed construction and potential community impacts after receiving notice from the resident engineer.

NOISE-2: Shield loud pieces of stationary construction equipment if complaints are received.

NOISE-3: Locate portable generators, air compressors, etc., as far away from sensitive noise receptors as feasible.

NOISE-4: Limit grouping major pieces of equipment operating in one area to the greatest extent feasible.

NOISE-5: Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators, intact and operational. Internal combustion engines used for any purpose on or related to the job shall be equipped with a muffler or baffle of a type recommended by the manufacturer.

NOISE-6: Consult district noise staff if complaints are received during the construction process.

The following Caltrans Standard Specification for noise control will also be implemented.

NOISE-7: If nighttime construction is necessary, the noisiest construction activities should be done as early in the evening as possible. Caltrans Standard Specifications (Section 14-8.02) require the contractor to control and monitor noise resulting from work activities and not to exceed 86 A-weighted decibels maximum sound level at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

2.1.14 Population and Housing

The project would not change the capacity or function of State Route 1, would not add or alter access to State Route 1, and would, therefore, not influence population growth. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Population and Housing
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

2.1.15 Public Services

The project consists of the repair or replacement of existing highways and would not result in the need for new or modified public services. Considering this information, the following significance determinations have been made:

Question:	CEQA Significance Determinations for Public Services
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?	No Impact
Police protection?	No Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

2.1.16 Recreation

This project would preserve and extend the service life of the existing pavement and facilities and would not change the capacity or function of the

highway. The project would, therefore, not influence the use of local recreational facilities.

Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Recreation
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
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

2.1.17 Transportation

The purpose of this project is to preserve and extend the service life of the existing pavement and facilities; therefore, the project would not change the function of the highway. Because the project would not increase the capacity of the highway, it would not influence vehicle miles traveled. The project, therefore, would not conflict with relevant transportation programs, plans, ordinances, or policies. See Appendix C for the coastal policy analysis completed for this project.

Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Transportation
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

Question—Would the project:	CEQA Significance Determinations for Transportation
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

Affected Environment

The proposed project spans about 5.88 miles along State Route 1 in Monterey County, from the City of Marina to Castroville. Within this area, State Route 1 is a four-to-six-lane access-controlled freeway consisting of 12-foot-wide travel lanes with paved shoulders that vary from 5 to 10 feet in width.

State Route 1 serves as the main connection between Santa Cruz and Monterey. The corridor is also the main coastal route between the San Francisco Bay Area and the Big Sur coast. State Route 1 serves local and interregional traffic, which primarily includes recreational, local commuters, and limited commercial users.

Environmental Consequences

Highway reliability would be improved by preserving and extending the service life of the existing pavement and facilities that, in the long term, would increase the susceptibility of the highway. There would be traffic delays during construction due to temporary closures and ramp closures. On State Route 1, there would be at least one lane open in each direction at all times, with the exception of one-way traffic control possibly being needed for the work proposed near Reservation Road. However, traffic stops and detours would be executed in accordance with the transportation management plan. Emergency services would be notified of potential disruptions, delays, or detours in advance to minimize impacts on emergency access.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measure would further reduce the potential for impacts on transportation.

TRAFFIC-1: A traffic management plan will be prepared to address any potential traffic delays on State Route 1 that may occur during project construction due to temporary closures on either side of the highway. This would ensure that coastal access via State Route 1 would be maintained at all times throughout the construction period and would account for emergency access and limit delays. Traffic control during construction will be handled by changeable message signs, construction area signs, and lane closures. A

public awareness campaign will be conducted. During the hours of construction, there will be intermittent single-lane closures as well as connector or ramp closures. There are no anticipated freeway closures for this project. The construction work zone speed limit will be reduced by 10 miles per hour in compliance with the California Manual for Setting Speed Limits.

2.1.18 Tribal Cultural Resources

Considering the information in the Cultural Resources Screened Undertaking Memorandum dated February 2023, the following significance determinations have been made. A systematic review of the project description, mapping, as-builts, assessment of culvert locations, and previous archaeological reports confirmed that there are no archaeological or tribal cultural resources within the project’s area of direct impact:

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 Significance Determinations for Tribal Cultural Resources
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	No Impact

2.1.19 Utilities and Service Systems

Based on currently available information and preliminary site investigations conducted by the project development team, Caltrans does not expect relocations for any utilities throughout the project limits. Considering this information, the following significance determinations have been made:

Question—Would the project:	CEQA Significance Determinations for Utilities and Service Systems
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

2.1.20 Wildfire

The California Department of Forestry and Fire Protection provides a fire hazard severity zone mapping tool that helps in assessing the project location's vulnerability to future wildfire events. The fire hazard severity zones are developed using a science-based and field-tested model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior. Many factors are considered, such as vegetation, topography, climate, crown fire potential, ember production and movement, and the fire history of the area. There are three levels of hazards used in this mapping tool: moderate, high, and very high. These areas can fall under three different responsibility areas: Local Responsibility, State Responsibility, and Federal Responsibility. The entire project limits fall within the Local Responsibility Area. The Monterey County Community Wildfire Protection Plan was developed by the Fire Safe Council for Monterey County with input from agencies such as the California Department of Forestry and Fire Protection, the U.S. Forest Service, the Bureau of Land Management, and other

stakeholders. The entire project limits fall within an area of “Little or No Threat” under the Monterey County Fire Threat Rating Map.

Wildfires directly affect highways by burning infrastructure such as wooden posts for signs and guardrails. Wildfires indirectly affect highways because they can contribute to landslides and flooding exposure by burning off soil-stabilizing vegetation and reducing the capacity of soils to absorb rainfall. Wildfire smoke can also affect visibility and the health of the public and Caltrans staff.

Caltrans 2023 Revised Standard Specifications Section 7-1.02M(2) mandates fire prevention procedures during construction, including a fire prevention plan. The project would not introduce new fire-vulnerable structures into the project area and is not anticipated to exacerbate the impacts of wildfires intensified by climate change or be any more susceptible to wildfire damages than under the current conditions.

Considering this information, along with the information in the Climate Change Technical Report dated August 2023, the following significance determinations have been made:

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

Question—Would the project:	CEQA Significance Determinations for Wildfire
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

2.1.21 Mandatory Findings of Significance

Question:	CEQA Significance Determinations for Mandatory Findings of Significance
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant Impact
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?	Less Than Significant Impact

Affected Environment

Project work would occur from post miles R85.1 to R90.98 along State Route 1 in Monterey County. Construction activities would occur entirely within the Caltrans right-of-way.

State Route 1 is a four-to-six-lane access-controlled freeway consisting of 12-foot-wide travel lanes with paved shoulders that vary from 5 to 10 feet in width. State Route 1 within the project limits is not classified as an Officially Designated State Scenic Highway. Within the project limits, the highway passes through relatively flat topography characterized by sand dunes near the City of Marina, transitioning to agricultural fields with occasional industrial uses. The highway crosses the Salinas River, and as it nears Castroville, residential and commercial uses begin.

The project could affect Smith’s blue butterfly, as described in Section 2.1.4, Biological Resources. As explained in Section 2.1.5, Cultural Resources, and

Section 2.1.18, Tribal Cultural Resources, project work would occur outside of culturally significant areas. The project would not impact paleontological resources, as delineated in Section 2.1.7, Geology and Soils.

Environmental Consequences

The project was evaluated for potential impacts on biological resources, as explained in Section 2.1.4, Biological Resources. There are no sensitive natural communities within the Biological Study Area, and it will, therefore, have no permanent or temporary impacts on sensitive natural communities. Temporary and permanent impacts on jurisdictional and riparian areas are not anticipated to occur as a result of project activities. The Federal Endangered Species Act Section 7 effects determination is that the project will not affect special-status plant species or their respective habitats. While the project may affect the Smith's blue butterfly, the impacts would be considered less than significant with the implementation of the avoidance, minimization, and/or mitigation measures outlined in Section 2.1.4, Biological Resources and Section 2.1.21, Mandatory Findings of Significance. The project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

In addition, the project was evaluated for potential impacts on cultural resources, tribal cultural resources, and paleontological resources in Section 2.1.5, Cultural Resources, Section 2.1.18, Tribal Cultural Resources, and Section 2.1.7, Geology and Soils. It was determined that no such resources exist within the project limits; therefore, the project would not eliminate important examples of the major periods of California history or prehistory.

In response to item c) above, the project intends to preserve 22.183 lane miles of Class 2 pavement, pave beyond gore areas, rehabilitate one drainage system, replace traffic management system elements, rehabilitate lighting, and upgrade guardrails to MASH standards. All of these improvements involve features essential for maintaining a quality transportation corridor for use by the traveling public. The project provides avoidance and minimization measures for aesthetics, air quality, and noise, as well as standard specifications for hazardous waste and noise. No significant impacts would result to the human environment.

The project includes avoidance and minimization measures to reduce the impact the project may have on the aesthetic environment. Although potential visual changes would occur, the same type of elements proposed with this project are seen elsewhere along the highway and are not, by themselves, inconsistent with the rural roadway character of the region or throughout the state. With the implementation of measures listed in Section 2.1.1, Aesthetics, the proposed drainage structures, paved surfaces, traffic management system elements, and other roadside elements would be subordinate to the

overall experience of traveling along the highway and would be consistent with the aesthetic and visual protection goals for State Route 1. Therefore, these visual changes would only cause a minor reduction in visual quality in the immediate project area.

The project would include Caltrans standard measures for hazardous waste testing and monitoring to protect the public from hazards that could arise from the project's construction activities. The project would not generate hazards or expose the public to hazards that could result in substantial adverse effects. Therefore, the project would not result in considerable impacts on the public due to hazardous waste.

The project would cause a temporary increase in air emissions and fugitive dust during the construction period. Ultimately, however, there will be no difference in long-term air emissions with or without the project. Impacts due to fugitive dust generation from heavy equipment use and earthwork during construction would be considered less than significant with the implementation of standard construction dust and emission minimization practices and procedures.

Finally, the project would inevitably generate noise during the construction process. The increase in noise levels because of construction activities would not be substantial because construction activities would be temporary and intermittent.

Avoidance and minimization measures to reduce disturbance due to construction noise are listed in Section 2.1.13, Noise. In addition, the project includes Caltrans Standard Specifications for noise control to minimize potential noise-related disturbances caused by construction activities.

The project would not impact water quality and is not expected to exacerbate the impacts of wildfires on human beings.

Avoidance, Minimization, and/or Mitigation Measures

The following general minimization recommendation was made to reduce the overall decline in the health of the identified resource:

Smith's blue butterfly

Cumulative-1: The main agency with regulatory authority over Smith's blue butterfly is the U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service should continue efforts to support projects that improve habitat acreage and function for Smith's blue butterfly through enhancement and creation. Providing suitable contiguous habitat would make the species and its habitat more resilient and resistant to decline.

A complete list of Caltrans Standard Specifications and avoidance, minimization, and/or mitigation measures for the project can be found in

Section 1.5, Standard Measures Included in All Build Alternatives, Section 2.1, CEQA Environmental Checklist, and Appendix C, Avoidance, Minimization, and/or Mitigation Measures Summary.

Appendix A Title VI Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, GOVERNOR

California Department of Transportation

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September 2022

NON-DISCRIMINATION POLICY STATEMENT

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To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

A handwritten signature in black ink, appearing to read 'Tony Tavares', is written over a horizontal line.

TONY TAVARES
Director

“Provide a safe and reliable transportation network that serves all people and respects the environment”

Appendix B Coastal Policy Analysis

The project is within the coastal zone and, therefore, has the potential to affect resources protected by the Coastal Zone Management Act of 1972. The Coastal Zone Management Act is the main federal law enacted to preserve and protect coastal resources. The Coastal Zone Management Act sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan can review federal permits and activities to determine if they are consistent with the state's management plan.

California has developed a coastal zone management plan and has enacted its own law, the California Coastal Act of 1976, to protect the coastline. The policies established by the California Coastal Act are similar to those of the Coastal Zone Management Act. They include the protection and expansion of public access and recreation; the protection, enhancement, and restoration of environmentally sensitive areas; the protection of agricultural lands; the protection of scenic beauties; and the protection of property and life from coastal hazards. The California Coastal Commission is responsible for implementation and oversight under the California Coastal Act.

Just as the federal Coastal Zone Management Act delegates power to coastal states to develop their own coastal management plans, the California Coastal Act delegates power to local governments to enact their own local coastal programs. The project is subject to the Monterey County Local Coastal Program as well as the City of Marina's Local Coastal Program, which was certified in 1982. Local coastal programs contain the ground rules for the development and protection of coastal resources in their jurisdiction consistent with the California Coastal Act goals. A Federal Consistency Certification would be needed as well.

The Monterey County General Plan includes a Land Use Element, which contains a local coastal program policy document outlining coastal plan policies for the county. The project is within the North County Land Use Planning Area, which was adopted and certified in 1988 with the Monterey County General Plan.

The following is a list of policies from Chapter 3 of the California Coastal Act (Resource Planning and Management Policies), Monterey County's North County Land Use Plan, and the City of Marina's Land Use Plan. The relevant policies from each plan have been grouped together by subject. For each policy, a determination was made for whether the project was consistent with coastal zone policies, and a discussion was provided. Policies for resources that would not be affected by the project have not been included.

Public Access and Circulation
Relevant Policies

California Coastal Act, Chapter 3

- Section 30211 – Development Not to Interfere with Access
- Section 30223 – Upland Areas
- Section 30252 – Maintenance and Enhancement of Public Access
- Section 30254 – Public Works Facilities

North County Land Use Plan

- 3.1.2-1 – Transportation; Highway 1
- 3.1.2-4 – Transportation; Highway 1
- 4.3.6-1 – Recreation; North County Beaches and Dunes

City of Marina Land Use Plan

- Access Component – General Policy 1
- Access Component – General Policy 2
- Access Component – Reservation Road Recommendation 1
- Access Component – General Guideline 1
- Access Component – General Guideline 2
- Access Component – General Guideline 3
- Access Component – Reservation Road Guideline 1

Consistency Analysis

Traffic delays on State Route 1 may occur during project construction due to temporary closures on either side of the highway. The traffic management plan proposed for the construction period would ensure that coastal access via State Route 1 would be maintained at all times. Ultimately, the project would ensure consistent coastal access via State Route 1.

No coastal policy inconsistencies are expected.

Visual and Scenic Resources

Relevant Policies

California Coastal Act, Chapter 3

- Section 30251 – Scenic and Visual Qualities

North County Land Use Plan

- 2.2.1 – Key Policy
- 2.2.2-1 – Ocean Shoreline Viewshed
- 2.2.2-2 – Coastal Scenic Resources
- 2.2.2-6 – Agricultural Land
- 2.2.3-4 – Roadway Design
- 2.2.3-5 – Utilities
- 2.2.3-6 – Native Trees

City of Marina Land Use Plan

- Preservation and Enhancement of Coastal Views Policy 1 – Highway 1 Dune Views
- Preservation and Enhancement of Coastal Views Policy 3 – Revegetation
- Preservation and Enhancement of Coastal Views Policy 4 – Highway 1 Vernal Pond Views

Consistency Analysis

As described in more detail in the aesthetics section (Section 2.1.1), this project would result in visual changes as seen from public viewpoints, such as State Route 1 and some intersecting local streets. An increased visual scale of the highway facility would primarily be the result of the introduction of additional drainage structures, paved surfaces, traffic management system elements, and other roadside elements. While they would not be unexpected elements in the roadway environment, their increased size and contrasting appearance would make these otherwise visually neutral features potentially more noticeable and would contribute somewhat to the increased visual scale of the highway facility.

Although these potential visual changes would occur, the same type of elements proposed with this project are seen elsewhere along the highway and are not, by themselves, inconsistent with the rural roadway character of the region or throughout the state. As a result, the proposed drainage structures, paved surfaces, traffic management system elements, and other

roadside elements would be subordinate to the overall experience of traveling along the highway. Although most of the project elements would not be uncharacteristic for the setting, viewer sensitivity may be heightened because of the project's work locations within the coastal zone.

However, Caltrans anticipates that with the implementation of the proposed avoidance and minimization measures, the project would be consistent with the aesthetic and visual resource protection goals along State Route 1, and potential visual impacts would be reduced to a level of less than significant. Therefore, no coastal policy inconsistencies are expected regarding scenic resources.

Based on currently available information and preliminary site investigations conducted by the project development team, Caltrans does not expect relocations for any utilities at any of the project locations. Therefore, no inconsistencies with any coastal policies regarding utilities are expected.

Archaeological and Paleontological Resources Relevant Policies

California Coastal Act, Chapter 3

- Section 30244 – Archaeological or Paleontological Resources

North County Land Use Plan

- 2.9.2-1 – Archaeological Resources
- 2.9.2-2 – Archaeological Resources
- 2.9.2-3 – Archaeological Resources
- 2.9.2-4 – Archaeological Resources
- 2.9.3-1 – Archaeological Resources
- 2.9.3-2 – Archaeological Resources

Consistency Analysis

As described in more detail in the Cultural Resources section (Section 2.1.5), there are no historic properties located within the project area of potential effects. Caltrans staff conducted a records search within the Caltrans District 5 Cultural Resources Database. The records search revealed that at least six cultural resource studies have been conducted within the search radius, and no prehistoric sites are documented within the project's Area of Direct Impact. While archaeological and paleontological resources are not expected to be encountered, standard specifications that cover the appropriate handling of these resources if they were to be inadvertently discovered have

been included in the project. Therefore, the project would be consistent with coastal policies related to historic resources.

Hazards and Hazardous Waste

Relevant Policies

California Coastal Act, Chapter 3

- Section 30232 – Oil and Hazardous Substance Spills
- Section 30253 (1) – Minimization of Adverse Impacts: Geologic, Flood, and Fire Hazards.

North County Land Use Plan

- 2.8.2-1 – Hazards
- 2.8.3-A.1 – Geologic Hazards
- 2.8.3-A.4 – Geologic Hazards
- 2.8.3-A.5 – Geologic Hazards
- 2.8.3-A.7 – Geologic Hazards
- 2.8.3-B.2 – Flood Hazards
- 2.8.3-B.3 – Flood Hazards
- 2.8.3-B.4 – Flood Hazards
- 2.8.3-B.5 – Flood Hazards
- 2.8.3-C.1 – Fire Hazards
- 2.8.3-C.4 – Fire Hazards
- 2.8.3-C.5 – Fire Hazards

City of Marina Land Use Plan

- Geotechnical Policy 4 – Geotechnical Report

Consistency Analysis

There are no hazardous waste sites or businesses commonly associated with hazardous waste generation that would have the potential to impact this type of project. Implementation of Caltrans' Best Management Practices, Standard Specifications, and the measure included in the Water Pollution Control Program would limit the potential for hazardous waste spills to occur and provide instructions for the appropriate containment, cleanup, and handling of

hazardous substances due to accidental spills. The project would, therefore, be consistent with California Coastal Act Policy 30232.

The project is along a rural highway with few public services aside from recreational opportunities. State Route 1 is listed as a primary evacuation route in the North County Region Evacuation Guide. However, the traffic management plan would account for emergency evacuations, and therefore, the evacuation plan would not be impaired. The project would also not change the fire risk in the area.

While the project has areas rated as high risk for liquefaction and soil erosion potential, this project is not expected to further exacerbate these risks. Proposed work at these spot locations would include guardrail replacement, asphalt concrete spillway replacement, paving beyond gore areas, and pavement preservation via cold planing or overlaying. For more information regarding geologic hazards, please see Section 2.1.7, Geology and Soils, of the environmental document.

Air Quality and Greenhouse Gas

Relevant Policies

California Coastal Act, Chapter 3

- Section 30253 (3), (4) – Minimization of Adverse Impacts: Pollution; Energy Conservation

Consistency Analysis

The project would not add additional lanes or capacity to the highway; therefore, no long-term changes in emissions would result. By incorporating appropriate engineering design and following Caltrans' Best Management Practices and standard specifications during construction, minimal, short-term air quality impacts would be expected. Implementing the greenhouse gas reduction strategies listed in Section 2.1.8 would help offset greenhouse gas emissions during project construction. No coastal policy inconsistencies are expected.

Water Quality and Erosion

Relevant Policies

California Coastal Act, Chapter 3

- Section 30231 – Biological Productivity; Water Quality

North County Land Use Plan

- 2.5.2-2 – Water Quality
- 2.5.3-A.4 – Water Supply
- 2.5.3-B.1 – Water Quality; Riparian Corridors

- 2.5.3-C.6 (c) – Erosion Control Measures; Erosion Control Plan
- 2.5.3-C.6 (e) – Erosion Control Measures; Vegetation Cover Retention

City of Marina Land Use Plan

- Geotechnical Policy 1 – Wave Erosion
- Geotechnical Policy 2 – Dune Vegetation
- Geotechnical Policy 3 – Wind Erosion

Consistency Analysis

As described in more detail in the hydrology and water quality section (Section 2.1.10), the proposed project has the potential to directly discharge stormwater within the project limits into one or both of the Salinas River and the Salinas River Lagoon. This project does not involve substantial excavation or earthwork activities that would cause or exacerbate existing turbidity conditions. By incorporating appropriate engineering design and robust stormwater Best Management Practices during construction, minimal, short-term water quality impacts are anticipated. Additionally, the project contractor will prepare a site-specific Water Pollution Control Plan approved by Caltrans. Therefore, the project would not result in significant, long-term impacts on water quality, and no coastal policy inconsistencies are expected.

Environmentally Sensitive Habitat Areas; Biological Resources

Relevant Policies

California Coastal Act, Chapter 3

- Section 30233 – Diking, Filling, or Dredging
- Section 30236 – Water Supply and Flood Control
- Section 30240 – Environmentally Sensitive Habitat Areas; Adjacent Developments
- Section 30260 – Location or Expansion

North County Land Use Plan

- 2.3.2-1 – Environmentally Sensitive Habitat Areas
- 2.3.2-2 – Environmentally Sensitive Habitat Areas
- 2.3.2-3 – Environmentally Sensitive Habitat Areas
- 2.3.2-5 – Field Surveys
- 2.3.2-8 – Environmentally Sensitive Habitat Areas

- 2.3.2-9 – Non-Invasive Plant Landscaping
- 2.3.2-10 – Rare and Endangered Bird Species
- 2.3.3-A.6 – Terrestrial Plant Habitats; Coastal Dune Habitat
- 2.2.3-B.2 – Riparian, Wetland, and Aquatic Habitats
- 2.2.3-B.5 – Riparian, Wetland, and Aquatic Habitats
- 2.2.3-B.6 – Riparian, Wetland, and Aquatic Habitats
- 2.2.3-C.2 – Terrestrial Wildlife
- 2.4.2-2 – Diking, Dredging, Filling, and Shoreline Structures; Wetlands
- 2.4.2-3 – Diking, Dredging, Filling, and Shoreline Structures; Marine, Estuarine, and Wetland Habitats
- 2.4.2-6 – Diking, Dredging, Filling, and Shoreline Structures
- 2.4.2.3-6 – Diking, Dredging, Filling, and Shoreline Structures; California Coastal Act Consistency
- 4.3.6-A.1 – Resource Conservation; Environmentally Sensitive Habitats and Wildlife
- 4.3.6-A.2 – Resource Conservation; Rare and Endangered Plant and Animal Species

City of Marina Land Use Plan

- Rare and Endangered Species: Habitat Protection Policy 1
- Rare and Endangered Species: Habitat Protection Policy 2 – Primary Habitat
- Rare and Endangered Species: Habitat Protection Policy 3 – Secondary Habitat
- Rare and Endangered Species: Habitat Protection Policy 4 – Wetlands
- Rare and Endangered Species: Habitat Protection Policy 5 – Dune Habitat
- Rare and Endangered Species: Habitat Protection Policy 6 – Management Plan
- Wetlands Protection Policy 1 – Vernal Ponds
- Wetlands Protection Policy 2 – Vernal Ponds

- Wetlands Protection Policy 3 – Riparian Setback

Consistency Analysis

The Federal Endangered Species Act Section 7 effects determination is that the project will not affect special-status plant species. Further, the Federal Endangered Species Act Section 7 effects determination is that the proposed project will have no effect on Monterey spineflower critical habitat. Although Monterey spineflower and sandmat manzanita occurrences are located next to areas where ground-disturbing activities are anticipated, both species will be avoided. Avoidance and minimization measures implemented to avoid impacts on special-status plant species are detailed in Section 2.1.4, Biological Resources.

Due to a lack of suitable habitat, the Federal Endangered Species Act Section 7 effects determination is that the proposed project will have no effect on the following federally listed animal taxa: tidewater goby, California red-legged frog, California Ridgway's rail, western snowy plover, California tiger salamander, longfin smelt, monarch California overwintering population, Santa Cruz long-toed salamander, and South-Central California Coast steelhead. Further, the Federal Endangered Species Act Section 7 effects determination is that the proposed project will have no effect on critical habitat for the South-Central California Coast steelhead and tidewater goby.

The Federal Endangered Species Act Section 7 effects determination is that the project may affect and is likely to adversely affect Smith's blue butterfly. Caltrans anticipates the proposed project will qualify for Federal Endangered Species Act incidental take coverage under the Programmatic Biological Opinion for Smith's blue butterfly between Caltrans and the U.S. Fish and Wildlife Service. No Smith's blue butterflies were observed during surveys for this project. However, suitable buckwheat habitat occurs within the Biological Study Area, and therefore, the presence of Smith's blue butterfly is assumed. Estimates of permanent and temporary impacts on Smith's blue butterfly habitat are quantified in Table 2.1. The potential need to capture and relocate Smith's blue butterflies would subject individuals to stress that could result in adverse effects. Injury or mortality could occur via accidental crushing by worker foot traffic or construction equipment. The potential for these impacts is anticipated to be low due to no observations of the species during protocol surveys, but this could change over time, where these species could potentially expand populations or colonize marginal habitat found within the Biological Study Area.

With the implementation of the measures included in the Programmatic Biological Opinions provided by the U.S. Fish and Wildlife Service for Smith's blue butterfly, along with other avoidance, minimization, and/or mitigation measures detailed in Section 2.1.4, Biological Resources, impacts to Smith's blue butterfly and any other special-status species would be reduced to a less

than significant level, and the project would be consistent with related coastal policies.

Temporary and permanent impacts on jurisdictional and riparian areas are not anticipated to occur as a result of project activities. Within the project limits, the Salinas River is a U.S. Army Corps of Engineers-regulated other water. The river and its surrounding riparian habitat are also under the jurisdiction of the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the California Coastal Commission. Although these jurisdictional waters and riparian habitats exist within the Biological Study Area, these habitats will not be impacted by project activities. The avoidance and minimization measures that would be implemented to ensure no impacts on these jurisdictional areas will result from this project are detailed in Section 2.1.4, Biological Resources.

Overall, with the incorporation of avoidance, minimization, and/or mitigation measures, the project would be consistent with coastal policies related to wetlands, coastal environmentally sensitive habitat areas, and biological resources.

Land Use

Relevant Policies

California Coastal Act, Chapter 3

- Section 30241 (e) – Prime Agricultural Land; Maintenance in Agricultural Production

North County Land Use Plan

- 2.6.2-1 – Agriculture; Prime and Productive Farmland
- 2.6.2-6 – Agriculture; Adjacent Developments
- 4.3.5-1 – Land Use
- 4.3.5-8 – Land Use
- 4.3.5-9 – Land Use
- 4.3.6-B.1 – Agriculture
- 4.3.6-C.5 – Rivers and Immediate Shorelines

Consistency Analysis

As described in more detail in the land use and planning section (Section 2.1.11), the project would not change the location, function, or capacity of State Route 1 and would not physically divide an established community. The project would not conflict with the Monterey County General Plan, the City of

Marina Land Use Plan, or any other policy or regulation meant to avoid or mitigate an environmental effect. Therefore, in relation to land use, no coastal policy inconsistencies are expected for this project.

Appendix C Avoidance, Minimization, and/or Mitigation Summary

2.1.1 Aesthetics

Avoidance, Minimization, and/or Mitigation Measures

The following measures would avoid or minimize impacts on the visual environment.

VIS-1: Preserve as much existing vegetation as possible. Prescriptive clearing and grubbing and grading techniques that save the most existing vegetation possible should be used.

VIS-2: Revegetate all disturbed areas with native plant species appropriate to each specific work location.

VIS-3: If tree removal is necessary at Reservation Road, then trees shall be replaced and maintained until established. The number and location of trees to be replanted would be determined by a District 5 Landscape Architect based on what would be feasible based on horticultural appropriateness, safety requirements, and constructability constraints.

VIS-4: Paving beyond the gore shall include aesthetic treatment to be determined and approved by a District 5 Landscape Architect.

VIS-5: If a retaining wall is necessary at Reservation Road, it shall include aesthetic treatment to be determined and approved by a District 5 Landscape Architect.

VIS-6: Guardrail posts should be stained or darkened to be visually compatible with selected rural settings, as determined and approved by a District 5 Landscape Architect.

VIS-7: Traffic management system elements aesthetic treatment, such as painting, to be determined and approved by a District 5 Landscape Architect.

VIS-8: Following construction, regrade and recontour all new construction staging areas and other temporary uses as necessary to match the surrounding pre-project topography.

VIS-9: All streetlights shall be directed downward and shall include cut-off lens fixtures such that no point source lighting is visible from nearby parcels.

2.1.3 Air Quality

The following measure would avoid or minimize impacts on air quality.

AIR-1: To minimize dust emissions from the project, Section 14-9.02 (Air Pollution Control) of the 2023 Standard Specifications states that the contractor is responsible for complying with all local air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the contract, including those provided in Government Code Section 11017 (Public Contract Code Section 10231). Additionally, the project-level Stormwater Pollution Prevention Plan will address water pollution control measures that cross-correlate with standard dust emission minimization measures, such as covering soil stockpiles, watering haul roads, watering excavation and grading areas, and so on. By incorporating appropriate engineering design and stormwater Best Management Practices during construction, minimal, short-term air quality impacts are anticipated.

2.1.4 Biological Resources

Avoidance, Minimization, and/or Mitigation Measures

The measures listed below would reduce potential impacts on biological resources. Mitigation measures are labeled as such, and the remaining measures are avoidance or minimization measures.

The measures have been organized by the primary resource or species they are designed to protect, but they may apply to several biological resources.

It should also be noted that the Water Pollution Control Program and many of the Best Management Practices and standard specifications outlined in Section 1.6 would avoid and minimize impacts on biological resources.

Wetlands, Other Waters, and Riparian Areas

The following avoidance and minimization measures will be implemented to ensure no impacts on these jurisdictional areas will result from the project:

BIO-1: Prior to any ground-disturbing activities, Environmentally Sensitive Area fencing shall be installed, as appropriate, around jurisdictional waters, coastal zone Environmentally Sensitive Habitat Areas, and the dripline of trees to be protected within the project limits. Caltrans-defined Environmentally Sensitive Areas shall be noted on design plans and delineated in the field prior to the start of construction activities.

BIO-2: During construction, all project-related hazardous material spills within the project site shall be cleaned up immediately. Readily accessible spill prevention and cleanup materials shall be kept by the contractor on-site at all times during construction.

BIO-3: During construction, erosion control measures shall be implemented. Silt fencing, fiber rolls, and barriers shall be installed as needed between the project site and jurisdictional other waters and riparian habitat. At a minimum, erosion controls shall be maintained by the contractor on a daily basis throughout the construction period.

BIO-4: During construction, the staging areas shall conform to Best Management Practices applicable to attaining zero discharge of stormwater runoff. At a minimum, all equipment and vehicles shall be checked and maintained by the contractor on a daily basis to ensure proper operation and avoid potential leaks or spills.

Special-Status Plant Species

BIO-5: All areas containing any listed plant species shall be delineated on the project's plan sheets as Environmentally Sensitive Areas. These areas shall be marked with highly visible construction fencing and will be off-limits to construction equipment and personnel.

BIO-6: To avoid impacts to any vegetation, all staging, equipment, and storage areas shall occur in existing pullouts or at paved locations that have been cleared by a Caltrans biologist.

BIO-7: Preconstruction surveys shall be conducted by a qualified biologist prior to any ground-disturbing activities to confirm the presence or absence of special-status plant species.

Smith's Blue Butterfly

The following measures are the applicable measures from the Programmatic Biological Opinion for Smith's Blue Butterfly that will be implemented for this project:

BIO-8: Caltrans will ensure that all construction activities follow well-defined procedures to avoid effects on the Smith's blue butterfly.

BIO-9: Caltrans will prohibit mowing and broadcast spraying of herbicide in stands of buckwheat. Within areas that contain buckwheat, control of invasive weeds, which is beneficial to buckwheat, will be achieved by spot spraying of herbicide and/or hand clearing.

BIO-10: Caltrans will ensure that only Service-approved biologists will participate in the capture, handling, and monitoring of the Smith's blue butterfly in all of its life stages and the handling of buckwheat plants.

BIO-11: Caltrans will ensure that ground disturbance for maintenance or project activities will not begin within stands of buckwheat until a Service-approved biologist is on-site.

BIO-12: Service-approved biologists will verify that the proposed work activity within stands of buckwheat meets all criteria established for the use of this biological opinion.

BIO-13: For maintenance work or project activity within stands of buckwheat, a Service-approved biologist will survey the work site no more than 30 days before the start of ground disturbance. If any life stage of the Smith's blue butterfly or its host plants, seacliff buckwheat and seaside buckwheat, is found and is likely to be killed or injured by work activities, the approved biologist will be allowed sufficient time to relocate seacliff buckwheat plants, duff, and/or soil from the site before work activities begin. The seacliff buckwheat and seaside buckwheat plants, duff, and/or soil will be hand removed and placed as close as possible to, but not on, living seacliff buckwheat plants. The Service-approved biologist will relocate the seacliff buckwheat plants, duff, and/or soil the shortest distance possible to a location that contains suitable habitat and will not be affected by project activities. The Service-approved biologist will maintain detailed records of the number of seacliff buckwheat and seaside buckwheat plants that are moved. Any seeds collected for replanting purposes will be sourced locally from the same metapopulation area.

BIO-14: Before any maintenance or project activity work begins within stands of buckwheat, a Service-approved biologist will provide training to all field personnel. At a minimum, the training will include a description of the Smith's blue butterfly and its habitat, the specific measures that are being implemented to conserve the Smith's blue butterfly, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

BIO-15: A Service-approved biologist will be present at the work site for maintenance or project activity within stands of buckwheat until all Smith's blue butterflies, seacliff buckwheat, and seaside buckwheat plants that are at risk due to project activities have been removed, workers have been instructed, and disturbance to habitat has been completed. After this time, Caltrans will designate a person to monitor on-site compliance with all minimization measures. The Service-approved biologist will ensure that this monitor receives the training outlined and assists in the identification of the Smith's blue butterfly and its host plant. If the monitor or the Service-approved biologist recommends that work be stopped because the Smith's blue butterfly or its host plants will be affected to a degree that exceeds the levels anticipated by Caltrans and the Service during a review of the proposed action, they will notify the resident engineer (the engineer that is directly overseeing and in command of construction activities) immediately. The resident engineer will either resolve the situation by eliminating the unanticipated effect(s) immediately or require that all actions causing these

effects be stopped. If work is stopped, the Service will be notified as soon as is reasonably possible.

Mitigation Measure BIO-16: An assemblage of native species will be used for the revegetation of project sites. Seacliff buckwheat seeds or plants will only be placed outside the vegetation control areas. The spread of invasive weeds during revegetation efforts will be controlled according to the Vegetation Management Guidelines developed as part of the Big Sur Coast Highway Management Plan.

BIO-17: The number of access routes, the size of staging areas, and the total area of the activity will be limited to the minimum necessary to achieve the project goal. Environmentally Sensitive Areas will be established to confine access routes and construction areas to the minimum area necessary to complete construction and minimize the impact on Smith's blue butterfly and seacliff buckwheat.

BIO-18: Caltrans will ensure that Best Management Practices are implemented according to the most current approved guidelines to control erosion and sedimentation during and after project implementation. Under the California Interagency Noxious Weed Free Forage and Mulch Program, California is taking steps to make noxious weed-free hay and straw widely available. Under this program, weed-free hay and straw bales will be used for erosion control measures when they become available.

BIO-19: Caltrans shall ensure that an annual report is completed and provided to the U.S. Fish and Wildlife Service following the template provided with the Programmatic Biological Opinion.

Western Pond Turtle

BIO-20: Prior to construction, a biologist determined qualified by Caltrans shall survey the Area of Potential Impact and, if present, capture and relocate any western pond turtles to suitable habitat outside of the Area of Potential Impact.

BIO-21: Observations of western pond turtles, other Species of Special Concern, and special-status species shall be documented on California Natural Diversity Database forms and submitted to the California Department of Fish and Wildlife upon project completion.

California Red-Legged Frog

BIO-22: During project activities, all trash that may attract predators or scavengers shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

BIO-23: If a California red-legged frog is found, work activities shall stop immediately within 100 feet of the frog, and agency consultation shall be initiated.

BIO-24: Before work activity begins, a qualified biologist will provide training to all field personnel. At a minimum, the training will include a description of the California red-legged frog and its habitat, the specific measures that are being implemented to conserve the species, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

Western Snowy Plover

BIO-25: If a western snowy plover is observed within 100 feet of the Area of Potential Impact during construction, a qualified biologist shall implement an exclusion zone, and work shall be avoided within the exclusion zone until the snowy plover is located greater than 100 feet from project-related disturbances. If an active western snowy plover nest is observed within 100 feet of the Area of Potential Impact, all project activities shall stop immediately within 500 feet, and technical assistance with the U.S. Fish and Wildlife Service shall be initiated.

Burrowing Owl, American Badger, and Monterey Shrew

BIO-26: A preconstruction survey shall be conducted no less than 14 days and no more than 30 days prior to any construction activities or any project activity likely to impact the burrowing owl, American badger, or Monterey shrew. The status of all dens will be determined and mapped. Known dens, if found occurring within the footprint of the activity, shall be monitored for three days with tracking medium and/or cameras to determine the current use. If Monterey shrew, burrowing owl, and/or American badger activity is observed during this period, the den shall be monitored for at least five consecutive days from the time of the observation to allow any resident animal to move to another den during its normal activity.

BIO-27: Prior to groundbreaking, a qualified biologist shall conduct an environmental education and training session for all construction personnel.

BIO-28: No canine or feline pets or firearms (except those associated with law enforcement officers and security personnel) shall be permitted on construction sites to avoid harassing, killing, or injuring burrowing owls, American badgers, and/or Monterey shrews.

BIO-29: Maintenance and construction excavations more than 2 feet deep shall be covered (e.g., with plywood, sturdy plastic, steel plates, or equivalent), filled at the end of each working day, or have earthen escape ramps no greater than 200 feet apart to prevent trapping sensitive species.

BIO-30: All construction pipes, culverts, or similar structures with a diameter of 1 inch or greater stored in the construction site overnight will be thoroughly inspected for Monterey shrews prior to being buried, capped, or otherwise used or moved. All construction pipes, culverts, or similar structures with a diameter of 3 inches or greater stored on the construction site overnight will be thoroughly inspected for American badgers prior to being buried, capped, or otherwise used or moved. If a Monterey shrew, burrowing owl, or American badger is discovered inside a pipe, the pipe shall not be moved until the species moves during its normal activity. If the identified species is in direct harm's way, the pipe may be moved to a safe location one time under the direct supervision of a qualified biologist.

Tricolored Blackbird and Other Nesting Birds

BIO-31: Prior to construction, vegetation removal shall be scheduled to occur from October 1 to February 13, outside of the typical nesting bird season, if possible, to avoid potential impacts on nesting birds. If tree removal or other construction activities are proposed to occur within 100 feet of potential habitat, a nesting bird survey shall be conducted by a biologist determined qualified by Caltrans no more than three days prior to construction. If an active nest is found, an appropriate buffer based on the habits and needs of the species shall be established. The buffer area shall be avoided until a qualified biologist has determined that juveniles have fledged.

Roosting Bats

BIO-32: Night work occurring near suitable structures shall be scheduled to occur from September 2 to February 14, outside of the typical bat maternity roosting season, if possible, to avoid potential impacts on roosting bats.

BIO-33: If construction activities are proposed to occur within 100 feet of potential habitat during the bat maternity roosting season (February 15 to September 1), a bat roost survey shall be conducted by a biologist determined qualified by Caltrans within 14 days prior to construction. If an active bat roost is found, an appropriate buffer shall be established based on the habits and needs of the species. The buffer area shall be avoided until a qualified biologist has determined that roosting activity has stopped.

Invasive Species

BIO-34: During construction, Caltrans will ensure that the spread or introduction of invasive exotic plant species will be avoided to the maximum extent possible.

BIO-35: Only clean fill shall be imported. When practicable, invasive exotic plants on the project site shall be removed and properly disposed of. All invasive vegetation removed from the construction site shall be taken to a landfill to prevent the spread of invasive species. If the soil from weedy areas must be removed off-site, the top 6 inches containing the seed layer in areas

with weedy species shall be disposed of at a landfill. Inclusion of any species that occurs on the California Invasive Plant Council's Invasive Plant Inventory in the Caltrans erosion control seed mix or landscaping plans for the project shall be avoided.

BIO-36: To minimize the introduction of invasive plant species, all vehicles, machinery, and equipment shall be in a clean and soil-free condition before entering the project limits. Construction equipment shall be certified as “weed-free” by Caltrans before entering the construction site.

2.1.8 Greenhouse Gas Emissions

The following measures would be implemented in the project to reduce greenhouse gas emissions and potential climate change impacts from the project related to construction activities:

GHG-1: To the greatest extent possible, schedule truck trips outside of peak morning and evening commute hours.

GHG-2: For improved fuel efficiency from construction equipment:

- Maintain equipment in proper tune and working condition.
- Use the right-sized equipment for the job.
- Use equipment with newer technologies when feasible.

GHG-3: Earthwork Balance: Reduce the need for transport of earthen materials by balancing cut and fill quantities.

GHG-4: Supplement existing construction environmental training with information on methods to reduce greenhouse gas emissions related to construction.

GHG-5: To the greatest extent possible, salvage rebar from demolished concrete and process waste to create usable fill.

GHG-6: To the greatest extent possible, maximize the use of recycled materials.

GHG-7: To the greatest extent possible, reduce construction waste. For example, reusing or recycling construction and demolition waste reduces the consumption of raw materials, reduces waste and transportation to landfills, and saves costs.

GHG-8: To the greatest extent possible, use recycled water or reduce consumption of potable water for construction.

GHG-9: Select pavement materials that lower the rolling resistance of highway surfaces as much as possible while still maintaining design and safety standards.

2.1.13 Noise

Avoidance, Minimization, and/or Noise Abatement Measures

The following avoidance and minimization measures would further reduce the potential for impacts on local noise levels.

NOISE-1: Notify the public in advance of the construction schedule when construction noise and upcoming construction activities likely to produce an adverse noise environment are expected. This notice shall be given two weeks in advance. A notice should be published in local news media of the dates and duration of the proposed construction activity. The District 5 Public Information Office posts notice of the proposed construction and potential community impacts after receiving notice from the resident engineer.

NOISE-2: Shield loud pieces of stationary construction equipment if complaints are received.

NOISE-3: Locate portable generators, air compressors, etc., as far away from sensitive noise receptors as feasible.

NOISE-4: Limit grouping major pieces of equipment operating in one area to the greatest extent feasible.

NOISE-5: Use newer equipment that is quieter and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine vibration isolators, intact and operational. Internal combustion engines used for any purpose on or related to the job shall be equipped with a muffler or baffle of a type recommended by the manufacturer.

NOISE-6: Consult district noise staff if complaints are received during the construction process.

The following Caltrans Standard Specification for noise control will also be implemented.

NOISE-7: If nighttime construction is necessary, the noisiest construction activities should be done as early in the evening as possible. Caltrans Standard Specifications (Section 14-8.02) require the contractor to control and monitor noise resulting from work activities and not to exceed 86 A-weighted decibels maximum sound level at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.

2.1.17 Transportation

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measure would further reduce the potential for impacts on transportation.

TRAFFIC-1: A traffic management plan will be prepared to address any potential traffic delays on State Route 1 that may occur during project construction due to temporary closures on either side of the highway. This would ensure that coastal access via State Route 1 would be maintained at all times throughout the construction period and would account for emergency access and limit delays. Traffic control during construction will be handled by changeable message signs, construction area signs, and lane closures. A public awareness campaign will be conducted. During the hours of construction, there will be intermittent single-lane closures as well as connector or ramp closures. There are no anticipated freeway closures for this project. The construction work zone speed limit will be reduced by 10 miles per hour in compliance with the California Manual for Setting Speed Limits.

2.1.21 Mandatory Findings of Significance

Avoidance, Minimization, and/or Mitigation Measures

The following general minimization recommendation was made to reduce the overall decline in the health of the identified resource:

Smith's blue butterfly

Cumulative-1: The main agency with regulatory authority over Smith's blue butterfly is the U.S. Fish and Wildlife Service. The U.S. Fish and Wildlife Service should continue efforts to support projects that improve habitat acreage and function for Smith's blue butterfly through enhancement and creation. Providing suitable contiguous habitat would make the species and its habitat more resilient and resistant to decline.

List of Technical Studies Bound Separately (Volume 2)

Air Quality, Greenhouse Gas, Noise, and Water Quality Memorandum, March 2023

Natural Environment Study, July 2023

Climate Change Report, October 2023

Cumulative Impact Assessment, July 2023

Geologic Hazards Report, July 2023

Location Hydraulic Study, June 2023

Cultural Resources Screened Undertaking Memorandum, February 2023

Hazardous Waste Initial Site Assessment, August 2023

Visual Impact Assessment, July 2023

Paleontology Review Memorandum, August 2023

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Lara Bertaina
District 5 Environmental Division
California Department of Transportation
50 Higuera Street, San Luis Obispo, California 93401

Or send your request via email to: lara.bertaina@dot.ca.gov

Or call: 805-779-0792

Please provide the following information in your request:

Project title: Marina to Castroville CAPM

General location information: On State Route 1 in Monterey County

District number-county code-route-post mile:05-MON-PM R85.1-R90.98

Project ID number: 0520000135