



Trancas Creek Bridge Replacement Project

Mitigated Negative Declaration/ Finding of No Significant Impact and Section 4(f) Evaluation

*State Route 1 (Pacific Coast Highway)
City of Malibu, Los Angeles County,
California*

District 7 – LA – 1 (PM 56.4/56.9)

EA: 07-29140/EFIS #: 0712000094

Prepared by the State of California Department of Transportation

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.



June 2017

Trancas Creek Bridge Replacement Project
State Route 1 Between Guernsey Rd. and Trancas Canyon – Broad Beach Rd.
In the City of Malibu, Los Angeles County
Post Mile 56.5 to 56.9

INITIAL STUDY/ENVIRONMENTAL ASSESSMENT and Section 4(f) Evaluation

Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C) and 49 USC 303

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with applicable federal laws for this project is being, or has been, carried-out by Caltrans
under its assumption of responsibility pursuant to 23 USC 327.

THE STATE OF CALIFORNIA
Department of Transportation
Lead Agency

City of Malibu
Los Angeles County Beaches and Harbors Department
California Transportation Commission (CTC)
Responsible Agencies

April 21, 2017
Date of Approval



Ronald Kosinski
Deputy District Director
Division of Environmental Planning – District 7
California Department of Transportation

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MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to improve the safety of Pacific Coast Highway (PCH) by replacing the Trancas Creek Bridge (Bridge No. 53 0027) in the City of Malibu, Los Angeles County, California. The proposed project is needed because the existing bridge has served long beyond its original design lifespan, has a history of scour-related issues, has structural deficiencies, and is not wide enough to avoid conflicts between motorists and bicyclists. The bridge traverses north to south over Trancas Creek just north of Zuma Beach, between Trancas Canyon Road and Guernsey Avenue. Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

Determination

The Department has prepared an Initial Study for this project, and following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

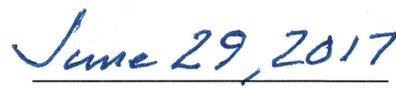
The proposed project would have no effect on cultural, environmental justice, farmlands/timberlands, land use planning, growth, mineral resources, paleontology, population and housing, public services, recreational resources, tribal cultural resources, and utilities and service system resources, wild and scenic rivers.

In addition, the proposed project would have less than significant effects to aesthetics, air quality, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation/traffic resources.

With mitigation measures incorporated, the proposed project would have less than significant effects to the following resources: 4(f), biology, and hydrology and water quality.



Ronald Kosinski
Deputy District Director
District 7
California Department of Transportation



Date

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

for

Trancas Creek Bridge Replacement Project

The California Department of Transportation (Caltrans) has determined that alternative 3- Long Bridge Replacement will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached Environmental Assessment and incorporated technical reports.

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

Notwithstanding any other provision of law, a claim arising under federal law seeking judicial review of the permit, license or approval issued by a federal agency for a highway or public transportation project shall be barred unless it is filed within 180 days after publication of a notice in the Federal Register announcing that the permit, license, or approval is final pursuant to the law under which agency action is taken, unless a shorter time is specified in the federal law pursuant to which judicial review is allowed.

June 29, 2017

Date



Ronald Kosinski
Deputy District Director
Division of Environmental Planning, District 7
California Department of Transportation

Summary

The project presented in this Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI) is subject to state and federal environmental review requirements and the project documentation has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Caltrans is the lead agency for both CEQA and NEPA. Federal Highway Administration (FHWA)'s responsibility for environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

S.1 Proposed Project

The California Department of Transportation (Caltrans) proposes to replace the Trancas Creek Bridge in Malibu, California. The existing bridge was built in 1927, widened in 1938, and carries an average of 22,100 vehicles a day, of which 3 percent are trucks. Erosion was documented in 1998, and an emergency contract was executed to mitigate the situation by placing 2-ton rock slope protection (RSP) behind the wing wall and upstream of Abutment 4. A scour evaluation conducted by Caltrans in 2009 documented the potential for future scouring at the Trancas Creek Bridge and concluded that settling could occur during a 10-year storm event. The bridge has a National Bridge Inspection (NBI) code of 113=3, which means the bridge is scour critical. In the event of a bridge closure, the shortest detour will be over 3 miles.

S.2 Purpose and Need

The purpose of this project is to maintain safe and reliable infrastructure for the traveling public. The project will also promote multimodal transportation through the incorporation of a Class II bike lane. This project is needed because the existing bridge has outlived its design life and has a history of scour related issues that can no longer be eased through maintenance. Reliable access through the City of Malibu at this segment of LA-1 is critical to the existing communities' economy and livelihood.

S.3 Proposed Action and Alternatives Under Consideration

The project proposes to replace the existing Trancas Creek Bridge with a wider structure and widen the adjacent roadway by up to 9 feet to improve safety for

motorists, bicyclists, and pedestrians. Both build alternatives would require a total of less than 1 acre of permanent right-of-way acquisition and less than 2 acres of temporary construction easement.

- **Alternative 1: No Build Alternative:** No changes to the existing bridge structure.
- **Alternative 2: Short Bridge Replacement:** The new bridge would be 2.5 feet higher, 9 feet wider, and 20 feet longer than the existing bridge. The new two-span bridge would be 90.5 feet wide and 120 feet long. Alternative 2 would be built so that it could be lengthened in the future, if needed. Retaining walls would be used to support the elevated roadway without the need for sloped embankments that would require additional right-of-way. Alternative 2 is estimated to cost \$6,500,000.
- **Alternative 3: Long Bridge Replacement:** The new four-span bridge would be 9 feet wider and 140 feet longer than the existing bridge. The new bridge would be 90.5 feet wide and 240 feet in length. The wider opening would allow for a 10-foot-wide, 8-foot-high, Americans with Disabilities (ADA) compliant cement path under the bridge structure. Alternative 3 is estimated to cost \$10,960,000.

Table S.1 provides a summary of potential project impacts.

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
Human Environment			
Land Use	If the proposed project is not built, there would be no change to existing land use.	The build alternatives would replace an existing bridge with a similar structure; there would be no increase in capacity. These actions will not cause any changes to existing land use or zoning.	<p>LU-1 In order to avoid loss of Zuma Beach parking spaces, the California Department of Transportation (Caltrans) will relocate utility poles to the edge of Caltrans right-of-way instead of onto beach property as originally proposed.</p> <p>LU-2 The Temporary Construction Easement (TCE) area will be returned to its original state after construction has been completed. Detailed design and construction of the Trancas Creek Bridge will be further discussed between the Project Development Team (PDT) and the Los Angeles County Department of Beaches and Harbors during the design phase.</p> <p>LU-3 Traffic control will be implemented during construction to ensure unimpeded access to Zuma County Beach.</p> <p>LU-4 The “Authorized Vehicles Only” entrance to the Zuma Beach parking lot will be utilized by construction vehicles to access the southbound side of the bridge. To prevent unauthorized access by the public, the entrance will be guarded at all times during construction and no public access will be allowed. When construction is not active, the gate will be locked and secured as directed by the Los Angeles County Beaches and Harbors Department.</p>
Growth	If the proposed project is not built, there would be no changes to existing growth rates or patterns.	The build alternatives would not change the existing capacity of this portion of PCH and would not alter the growth rate of the surrounding area.	
Community Character and Cohesion	If the proposed project is not built, no encroachment on any of the existing community facilities would occur. However, the existing bridge would continue to deteriorate, leading to potential failure of the bridge, which would disconnect the communities dependent on this bridge.	The build alternatives would not encroach on or affect the operations of the surrounding neighborhoods and community facilities. No adverse impacts to community character and cohesion are expected.	COM-1 To ensure that property owners are properly and fairly compensated for any acquisition required for this project, adequate funds will be set aside and utilized for that purpose.
Relocations and Real Property Acquisitions	If the proposed project is not built, there would be no relocations or real property acquisition.	The build alternatives would require the acquisition of a small amount of property from the adjacent Zuma County Beach and from private property. TCEs from the same	<p>COM-2 Caltrans will provide relocation assistance according to the Relocation Assistance Program outlined by Appendix D of this document.</p> <p>COM-3 Caltrans will coordinate with the homeowner throughout the</p>

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Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
		<p>properties would also be required.</p> <p>Alternative 2 would also permanently impact the property adjacent to the mouth of the Trancas Creek. Because the road would be about 2.5 feet higher than it currently is, the adjacent property's driveway would have to be sloped back for a distance of about 20 feet which would not be feasible. Caltrans will have to acquire the residential home for Alternative 2</p> <p>Alternative 3 will require temporary relocation of the adjacent residential home for a duration of 3 months to 2 years.</p>	<p>planning, construction, and post-construction phase to ensure the needs of the relocated persons are met and the relocation process takes place smoothly.</p>
Environmental Justice	<p>If the proposed project is not built, no impacts to the existing communities would occur.</p>	<p>The community characteristics within the project study area are representative of the City of Malibu as a whole. No adverse impacts to underprivileged communities are expected.</p>	
Utilities, Community Facilities, and Emergency Services	<p>If the proposed project is not built, no utilities, community facilities, or emergency services would be impacted. However, the existing bridge would continue to deteriorate, leading to potential failure of the bridge, which could cause disruptions to local utilities and services.</p>	<p>The build alternatives would require the relocation of several utility lines and have short-term effects on local accessibility and use by emergency service vehicles. The bridge would be completed by constructing one-half the bridge at a time, which would allow continuous traffic flow throughout the duration of the construction.</p>	<p>UT-1 All affected utility infrastructure will be relocated with consideration to minimize any disruption of service and to minimize any effects as much as possible.</p> <p>UT-2 A Transportation Management Plan will be implemented to provide detailed access and detour strategies that will minimize response times for emergency and public services.</p> <p>UT-3 The California Department of Transportation (Caltrans) will work with the City of Malibu to ensure public access and the availability of emergency and public services during the construction period.</p>
Traffic and Transportation/ Pedestrian and Bicycle Facilities	<p>If the proposed project is not built, there would be no impact to transportation. However, the existing bridge would continue to deteriorate, leading to potential failure of the bridge, which could cause disruptions to local transportation connectivity.</p>	<p>The build alternatives would replace the bridge, and widen it and the adjacent roadway by up to 9 feet to improve safety for bicycles and pedestrians. A 6-foot Class II bikeway would be incorporated on the southbound side of PCH. Traffic</p>	<p>TT-1 All affected transportation infrastructure will be replaced with equivalent transportation infrastructure of the same capacity as that currently present.</p> <p>TT-2 The California Department of Transportation (Caltrans) and its construction contractors will seek to minimize disruption of service as much as possible through the use of a Transportation Management Plan that will provide detailed</p>

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Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
		control will ensure smooth traffic flow during construction; one lane each way would be made available to the traveling public at all times during construction.	<p>access and detour strategies to minimize delays for the public and emergency vehicles. Recommendations in the Transportation Management Plan will include the following:</p> <ul style="list-style-type: none"> • Maintaining two open lanes to the traveling public during peak hours • Providing bicycle and pedestrian access at all times during construction • Adhering to Pacific Coast Highway (PCH) lane closure protocols <p>TT-3 Caltrans will work with the City of Malibu to ensure public access and the availability of emergency and public services during the construction period.</p>
Visual	If the proposed project is not built, no visual resources would be impacted.	The build alternatives would improve the view from the bridge through implementation of see-through railings (in place of the existing concrete railings). The new bridge would also be more aesthetically pleasing.	<p>VIS-1 The designs on the barrier used on the Zuma Beach parking lot can be incorporated into the new Trancas Creek Bridge to provide thematic consistency in the area.</p> <p>VIS-2 A bridge railing design approved by the City of Malibu through the Local Coastal Development Permit process, under the delegation of the California Coastal Commission will be used to improve the visibility of the beach and hills from the roadway.</p> <p>VIS-3 The use of earth-tone colors that match the natural soil/rock color in the vicinity should be considered for the concrete portions of the structure. This will help visually blend the structure to the natural surroundings.</p> <p>VIS-4 Nonnative plant species within and around the project site should be removed where possible. The planting of native plants around disturbed work areas will help restore the work site to a more natural state, creating a more consistent aesthetic for the area.</p> <p>VIS-5 Materials and design of site features such as coastal access points should be appropriate for the visual character of the location.</p>
Cultural Resources	If the proposed project is not built, no cultural resources would be impacted.	The build alternatives are not expected to impact any sensitive cultural resources near the project site	CUL-1 It is California Department of Transportation (Caltrans) policy to avoid impacts to cultural resources whenever possible. If buried cultural materials are encountered during construction, Caltrans' policy is to stop work immediately in that area until a qualified archaeologist can evaluate the

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Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<p>nature and significance of the find. Work can only resume after the approval to proceed has been given by a qualified Caltrans archaeologist or the District Heritage Resource Coordinator.</p> <p>CUL-2 If human remains are discovered, State Health and Safety Code Section 7050.5 requires that all work stops immediately, no further disturbance is to occur in the immediate vicinity of the remains, and the County Coroner be contacted immediately. District 7 will also be contacted immediately upon the unexpected finding of human remains. If the remains are thought to be Native American, Health and Safety Code Section 7050.5 dictates that within 24 hours of the discovery, the Coroner will notify the Native American Heritage Commission who will then notify the Most Likely Descendant pursuant to Public Resources Code (PRC) Section 5097.98. Further provisions of PRC 5097.98 will also be followed as applicable.</p>
Physical Environment			
Hydrology and Floodplain	The existing bridge is not high enough to avoid being inundated by a 100-year storm or a 50-year burned and bulk flow. If the proposed project is not built, there is the potential for flooding or damage to the bridge.	<p>Alternative 2 would raise the bridge by 2.5 feet to accommodate the 100-year storm and the 50-year burned and bulk flows.</p> <p>Alternative 3 would be at the same height as the existing bridge but would have a wider channel to accommodate the flows.</p> <p>Both alternatives would be designed to accommodate the hydrology of the area.</p>	
Water Quality and Storm Water Runoff	If the proposed project is not built, there would be no impacts related to water quality or storm water runoff.	Both build alternatives will add up to an estimated 0.2 acre of additional net impervious area to the project site. Construction work will occur inside Trancas Creek and would require the appropriate permits. To reduce the potential for runoff in the project area, a SWPPP and appropriate BMPs will be implemented. Work inside Trancas Creek and Trancas Lagoon would also	<p>WQ-1 In accordance with the Los Angeles County Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit, a storm water management program shall be implemented per the Municipal Separate Storm Sewer System (MS4) permit. For compliance with the Caltrans NPDES permit, a storm water management program shall be developed for pre-construction, construction, and post-construction best management practices (BMPs) in California Department of Transportation (Caltrans) right-of-way.</p>

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		<p>be performed outside the rainy season.</p>	<p>WQ-2 Work within Trancas Creek and Trancas Lagoon shall be scheduled to occur between May 2 and September 30 to avoid the rainy season.</p> <p>WQ-3 To reduce the potential for any potential runoff or run-on in the project area, construction site BMPs shall be installed prior to the start of construction. Additionally, the contractor shall be responsible for the implementation of BMPs including but not limited to:</p> <ul style="list-style-type: none"> • Runoff control measures shall be placed at the top of all excavation and embankment slopes. • Slope protection/slope interruption devices shall be implemented on applicable slopes during the construction period and, wherever possible, early implementation of permanent erosion control seeding or landscape planting shall be performed. • The contractor shall provide and maintain stabilized construction site entrances and exits throughout. • Regular watering of non-paved sites shall be performed, along with regular street sweeping and vacuuming on paved surfaces. • All slopes shall be protected with fiber rolls, silt fences, temporary slope drains, and early slope paving or landscaping as defined in the approved Storm Water Pollution Prevention Plan (SWPPP), especially during the rainy season from October 1 to May 1. • The total active disturbed soil area (DSA) in the proposed project limits will be maintained to a minimum by focusing on construction activities that avoid earthwork and by implementing the approved construction site BMPs. • The contractor will be required to manage all stock piles against wind and water erosion and contain concrete wastes with concrete washouts. • All catch basins and drainage inlets will include gravel bag berms or storm drain inlet protection. • For all construction equipment, fuels, and toxic chemicals, spill prevention and spill control measures will be implemented throughout the duration of construction.

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<ul style="list-style-type: none"> No heavy construction equipment should be stored on the beach zone, and all heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in non-operating status. A "Wash-out Pan" should be used to wash down any equipment that handles concrete or other chemical-based construction materials.
Geology/Soils/ Seismic/ Topography	If the proposed project is not built, no geology-related impacts would occur.	The project is located in an earthquake and tsunami zone. Both build alternatives would be built to current seismic standards. According to Caltrans records, no major slipouts, landslides, or other geotechnical problems have occurred in the project area.	
Hazardous Waste	If the proposed project is not built, there would be no hazardous waste-related impacts.	Both build alternatives would require earth-moving activities, thermoplastic striping removal, disturbance of aerially deposited lead, work near groundwater, and handling of treated wood waste. All hazardous waste materials would be handled according to appropriate Caltrans' protocols and federal and State laws.	<p>HW-1 A project-specific Lead Compliance Plan and Debris Containment and Disposal Work Plan will be prepared to address the removal, containment, storage, sampling, transport, and disposal of yellow thermoplastic and lead-based painted traffic stripe and/or pavement markings, and to prevent or minimize worker exposure to lead while handling the debris/residue (California Code of Regulations [CCR], Title 8, Section 1532.1, "Lead," and California Occupational Safety and Health Administration [Cal/OSHA] Construction Safety Order).</p> <p>HW-2 The California Department of Transportation (Caltrans) Office of Environmental Engineering will initiate a project-specific aerially deposited lead (ADL) site investigation to evaluate whether the excess ADL spoils generated can be reused on the project site and/or along the project corridor by adhering to the requirements of the Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (ADL Agreement) that the Department entered into with the California Department of Toxic Substances Control (July 2016). If the excess ADL soils cannot be reused on the project site and/or along the project corridor, the site investigation will also determine whether they are classified as federal or state hazardous waste that requires off-site disposal at a permitted Class I California hazardous waste disposal facility or can be relinquished to the contractor with</p>

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Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<p>or without restrictions on land use.</p> <p>HW-3 The site investigation data will be used to prepare a Lead Compliance Plan as required under CCR Title 8, Section 1532.1, "Lead," and the Cal/OSHA Construction Safety Order.</p> <p>HW-4 An Excavation and Transportation Plan will be prepared to establish the procedures that will be used to comply with requirements for excavating, stockpiling, transporting, and placing or disposing of material containing ADL.</p> <p>HW-5 Removal and disposal of metal beam guardrail wood posts shall be managed under CCR Title 22, Division 4.5, Chapter 34, which specifies guidelines for storage, accumulation, shipment/transport, and disposal of treated wood waste at specific landfills.</p> <p>HW-6 Surveying and sampling will be required to determine procedures for the proper removal, handling, and disposal of asbestos-containing materials (ACM) and lead-based paint (LBP) during construction. Upon completion and analyses of surveys and sampling, an Asbestos Compliance Plan, Asbestos Removal Work Plan, and Lead-Based Paint Compliance Plan, and Lead-Based Paint Removal Work Plan shall be completed and signed by a Certified Industrial Hygienist that outlines potential risks and appropriate monitoring plans, as well as safety measures, to reduce the risk of worker exposure to contamination.</p> <p>HW-7 A Dust Control Plan will be prepared and approved by the South Coast Air Quality Management District (SCAQMD) before commencing any work in areas containing ACM. The Dust Control Plan will outline procedures to prevent dust emission during excavation, stockpiling, transportation, or placement of materials containing ACM.</p> <p>HW-8 Removal and management of LBP during bridge demolition will be addressed in a project-specific Lead Compliance Plan.</p> <p>HW-9 Groundwater testing will be required during the final design phase to determine the extent of potential contamination in</p>

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Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<p>groundwater that will be encountered during construction, and to confirm whether contamination, if any, can be attributed to nearby sources and impacts from previous releases.</p> <p>HW-10 Additional site investigation work is required to include sampling to evaluate any residual concentrations of contamination that may be present on each site and within Caltrans right-of-way. The results of the additional site investigations will be used to prepare the appropriate remediation cost estimates to manage, handle, and dispose of any impacted soils during construction and following construction, should long-term monitoring or remedial actions be required.</p>
Air Quality	If the proposed project is not built, no air quality impacts would occur.	Neither build alternative would increase roadway capacity, and no long-term air quality impacts are expected. Both alternatives have the potential to result in temporary construction-related air emissions. Caltrans Standard Specifications will be followed during construction to ensure that air quality impacts are minimized.	<p>AQ-1 The construction contractor shall comply with the Caltrans Standard Specifications in Section 14 (2010).</p> <ul style="list-style-type: none"> • Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including South Coast Air Quality Management District (SCAQMD) rules and regulations and local ordinances. • Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18. <p>AQ-2 Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a “no visible dust” criterion either at the point of emission or at the right-of-way line as required by SCAQMD.</p> <p>AQ-3 Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas.</p> <p>AQ-4 Wash trucks as they leave the project site as necessary to control fugitive dust emissions.</p> <p>AQ-5 Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations Title 17, Section</p>

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Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<p>93114.</p> <p>AQ-6 Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.</p> <p>AQ-7 Locate equipment and materials storage sites at least 500 feet from the sensitive receptors.</p> <p>AQ-8 Keep construction areas clean and orderly.</p> <p>AQ-9 Establish environmentally sensitive areas or their equivalent at least 500 feet away from sensitive air receptors within which construction activities (e.g., extended idling, material storage, and equipment maintenance) would be prohibited, to the extent feasible.</p> <p>AQ-10 Use track-out reduction measures (e.g., gravel pads) at project access points to minimize dust and mud deposits on roads affected by construction traffic.</p> <p>AQ-11 Cover all transported loads of soils and wet materials prior to transport or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (PM) during transportation.</p> <p>AQ-12 Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease PM.</p> <p>AQ-13 Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.</p> <p>AQ-14 Install mulch or plant vegetation as soon as is practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement (e.g., straw blowing) may themselves cause dust and visible emission issues, and may need to use controls (e.g., dampened straw).</p>

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
Noise and Vibration	If the proposed project is not built, there would be no noise- or vibration-related impacts.	The proposed project is not a Type I project and is not expected to result in permanent noise impacts to the surrounding community. Temporary construction-related noise and vibration impacts will occur. Caltrans Standard Specifications will be used during construction to minimize noise and vibration impacts during construction.	<p>NOI-1 All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. No equipment shall have an un-muffled exhaust.</p> <p>NOI-2 As directed by the Caltrans Resident/Project Engineer, the contractor shall implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.</p> <p>NOI-3 All work shall adhere to Caltrans Standard Specifications, Section 7 1.011, "Sound Control Requirements," which states that noise levels generated during construction will comply with applicable local, State, and federal regulations, and that all equipment will be fitted with adequate mufflers according to the manufacturers' specifications.</p> <p>NOI-4 Noise control shall conform to the provisions in Section 14-8.02, "Noise Control," of the Caltrans Standard Specifications.</p>
Biological Environment			
Natural Communities	If the proposed project is not built, there would be no impacts to natural communities, but there would be limited opportunities for restoring Trancas Lagoon.	Both build alternatives would result in similar, minimal impacts to the already highly disturbed and isolated natural communities around the project site. Avoidance, minimization, and mitigation measures are recommended. Both alternatives would provide opportunities to restore Trancas Lagoon, but Alternative 2 would require the bridge to be lengthened further to maximize the potential restoration.	<p>NC-1 Temporary Construction Easements (TCEs) will be obtained to provide the contractor with construction access on both sides of Pacific Coast Highway (PCH). The boundaries of the TCEs will be fenced, and construction activity will not be allowed to occur beyond these limits.</p> <p>NC-2 Most of the foredunes complex shall be delineated and identified as an Environmentally Sensitive Area (ESA) (a small portion will be affected by construction equipment as it enters/exits the beach). ESA fencing shall be installed and maintained during construction of the southbound lanes on the beach side of the bridge. A qualified biologist will oversee the installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.</p> <p>NC-3 The existing foredune habitat will be restored per California Department of Fish and Wildlife (CDFW) and/or California Coastal Commission permitting requirements.</p>

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Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<ul style="list-style-type: none"> • Restoration shall include restoring dune contours on Trancas Beach and replanting coastal dune flora species: red sand verbena, dune primrose, and dune beach grasses. • This area shall remain protected for a minimum of 2 years post-restoration to allow for regrowth of slow-growing dune species. • Educational and directional signs shall be installed to designate this sensitive area and guide people away from the area. <p>NC-4 The sandbar willow scrub shall be delineated and identified as an ESA. ESA fencing shall be installed and maintained during construction to prevent intrusion into this area. A qualified biologist will oversee installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.</p> <p>NC-5 No heavy construction equipment will be stored on the beach.</p> <p>NC-6 Heavy equipment will be checked daily for leaks to avoid contamination. Drip pans will be placed under heavy equipment at the end of each day.</p> <p>NC-7 Following construction, all beach contours will be regraded to their original condition.</p>
Wetlands and Other Waters	If the proposed project is not built, there would be no impacts to wetlands and other waters, but there would be limited opportunities for restoring Trancas Lagoon and enhancing the wetlands.	Permanent impacts would result from the installation of new bridge piers, abutments, and supporting RSP. Temporary impacts resulting from disturbance from construction equipment and personnel would be the same for both alternatives. Permanent impacts due to the installation of new bridge piers, abutments, and supporting RSP would be slightly greater for Alternative 2. Avoidance, minimization, and mitigation measures are recommended. Both alternatives would provide opportunities to restore Trancas Lagoon and enhance the	<p>WET-1 To reduce impacts to waters of the United States (U.S.) and waters of the State, all work within Trancas Creek and Trancas Lagoon should be performed between April 1 and November 1 to avoid the rainy season.</p> <p>WET-2 A water diversion plan shall be developed and implemented to reduce potential impacts to water quality.</p> <p>WET-3 The Temporary Construction Easement (TCE) shall be delineated by an Environmentally Sensitive Area (ESA) fence that will be checked daily and maintained throughout the life of the project. If a breach should occur in the ESA fence, the Resident Engineer shall be contacted immediately.</p> <p>WET-4 No construction equipment shall be operated outside the TCE.</p>

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
		<p>wetlands, but Alternative 2 would require the bridge to be lengthened further to maximize the potential restoration.</p>	<p>WET-5 All equipment entering and exiting waters of the U.S. or waters of the State shall be washed down before and after daily operation to reduce the potential spread of nonnative or invasive species.</p> <p>WET-6 All heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in non-operating status.</p> <p>WET-7 A “Wash-out Pan” shall be used to wash down any equipment that handles concrete or other chemical-based construction materials.</p> <p>WET-8 Compensatory mitigation will be required for permanent impacts of 0.12 acre per the permits from the California Department of Fish and Wildlife (CDFW). Final details of compensatory mitigation will be determined with acceptance of signed permits. Typically, mitigation ratios range from 3:1 for riparian impacts to as high as 5:1 for wetland impacts.</p> <p>The California Department of Transportation (Caltrans) will perform on site mitigation to the extent feasible to restore 1.29 acres of temporarily impacted jurisdictional delineation wetlands and waters (Riverine & Seasonal Marshland) habitat as well as the sensitive coastal foredune habitat (if impacted).</p> <p>All impact resulting from construction equipment and disturbance of jurisdictional habitat and sensitive habitat must be restored and/or mitigated.</p>
Plant Species	<p>If the proposed project is not built, there would be no impacts to plant species.</p>	<p>Both build alternatives have the potential to impact the nearby southern coastal fore-dunes complex and a small number of the red sand verbena plant (CNPS 4.2-limited distribution) that resides on the dunes. The plant is not currently listed as threatened or endangered. Avoidance, minimization, and/or mitigation measures are recommended.</p>	<p>PS-1 Most of the foredunes complex shall be delineated and identified as an Environmentally Sensitive Area (ESA) (a small portion will be affected by construction equipment as it enters/exits the beach). ESA fencing shall be installed and maintained during construction of the southbound lanes on the beach side of the Trancas Creek Bridge. A qualified biologist will oversee the installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.</p> <p>PS-2 The existing foredune habitat will be restored per California Department of Fish and Wildlife (CDFW) and/or per City of Malibu through the Local Coastal Development Permit</p>

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<p>process, under the delegation of the California Coastal Commission.</p> <ul style="list-style-type: none"> • Restoration shall include restoring dune contours on Trancas Beach and replanting coastal dune flora species: red sand verbena, dune primrose, and dune beach grasses. • This area shall remain protected for a minimum of 2 years post-restoration to allow for regrowth of slow-growing dune species. • Educational and directional signs shall be installed to designate this sensitive area and guide people away from the area.
Animal Species	If the proposed project is not built, there would be no impacts to animal species.	Both build alternatives have the potential to impact a number of animal species of concern that occur around the project site. However, with implementation of the recommended avoidance and minimization measures, impacts to animal species will be avoided or minimized.	<p>AS-1 Construction activity, including vegetation removal and bridge demolition, shall be scheduled to occur between September 2 and February 14 to avoid the bird nesting season. If that is not feasible, the California Department of Transportation (Caltrans) Biologist shall be notified at least 2 weeks in advance so that preconstruction nesting bird surveys can be conducted. If nesting birds are observed, construction activity in the immediate area shall not occur until it is determined that the young birds have left the nest. A buffer zone shall be established and maintained during all phases of construction (150 feet for songbirds and 500 feet for raptors) to ensure that nesting birds are not adversely affected.</p> <p>AS-2 Delineation of the Temporary Construction Easement (TCE) and monitoring as described in Section 2.17 for the western snowy plover will be carried out in order to prevent equipment and personnel from encroaching upon shorebird foraging habitat.</p> <p>AS-3 If noise levels from construction exceeds 60 decibels (dB) at the edge of the TCE (110 feet from the edge of the bridge zone), then a sound barrier/blanket will be erected to minimize construction noise impacts.</p>

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
Threatened and Endangered Species	If the proposed project is not built, there would be no impacts to threatened and endangered species.	Both alternatives may affect, but are not likely to adversely affect, the western snowy plover and its designated critical habitat. Avoidance, minimization, and mitigation measures are recommended. The project is also located within the boundaries of the federally endangered Southern California steelhead trout population. However, there are no records of the steelhead trout population around the project site in recent records. Therefore, this project is not expected to impact steelhead trout.	<p>TE-1 The Temporary Construction Easement (TCE) will be delineated, fenced off, and monitored by a District Biologist from the California Department of Transportation (Caltrans) Division of Environmental Planning or a qualified on-call biologist during the nesting and breeding season (March 1 to September 30), as well as during the wintering season (October 1 to February 28). During normal construction activity, the biologist will monitor daily for western snowy plover eggs, nests, or nesting behavior in the project construction zone within the TCE. If any snowy plover eggs are discovered or individuals demonstrate nesting behavior within the TCE, or if any snowy plovers are observed in the construction zone during the non-breeding season, all work will stop until the fledglings and/or adults have vacated the area. The Ventura Fish and Wildlife Office will be called to inform staff of nesting activity and potential re initiation of Section 7 consultation. Biologists have the authority to stop all construction activity and will be in charge of the monitoring activity. If an on-call biologist is used, they must report daily activities to the Caltrans biologist.</p> <p>TE-2 Duties of the on-call biologist will include:</p> <ul style="list-style-type: none"> • Checking for nesting or roosting behavior prior to the start of work for each operational day; • Ensuring beach equipment operators are current with western snowy plover awareness training for beach work operation; • Checking western snowy plover fencing for any damage, breaks, or openings; • Completing a daily log report to be turned into the Resident Engineer and Caltrans Office; • Ensuring local citizens are aware of western snowy plover activity in the area and providing western snowy plover awareness material to beach goers; and • Informing Los Angeles County Beaches and Los Angeles County Lifeguards of western snowy plover activity if any individuals are observed. <p>TE-3 If nesting behavior and/or a nest is discovered, the following procedures will be initiated:</p>

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<ul style="list-style-type: none"> • If eggs or nests are discovered, then additional fencing will be installed with a minimum radius of 150 feet from the nest, and all construction activity will halt until the young have fledged; • Nests will be monitored daily and a daily western snowy plover log sheet of activity will be completed and turned into the Resident Engineer, and a copy sent to the Caltrans District 7 Office; and • If eggs or nests are discovered, then Ventura Fish and Wildlife Office staff will be notified as soon as possible for updates and additional guidance. <p>TE-4 Construction activity on the beach will be minimized to the extent feasible.</p> <ul style="list-style-type: none"> • If feasible, construction on the beach zone will occur outside of bird nesting season (September 30 to March 1). • The TCE will be maintained until construction ends and is defined by the Caltrans Design Engineer. Caltrans will coordinate with the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), and the California Coastal Commission for feedback on beach zone activity and necessary coastal zone protection requirements. • The construction staging area will be located on either the north side of Pacific Coast Highway (PCH) (open land east of Trancas Creek) or on the west end of the Zuma Beach parking lot. • During construction, equipment will not be allowed to be stored on the beach. <p>TE-5 Caltrans will present a western snowy plover awareness training program to all construction staff that may use the beach zone for construction activity. This program will describe the following information:</p> <ul style="list-style-type: none"> • The behavior of the western snowy plover and its distribution and habitat on Zuma Beach, • Threats to western snowy plover, • The detrimental effects of feeding wildlife, • The penalties for disobeying restrictions,

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<ul style="list-style-type: none"> • A map showing the TCE zone and proper Best Management Practices (BMPs) for minimizing beach impact, • The proper procedure to address injured or dead western snowy plovers, and • The contact information of the Caltrans District Biologist and Resident Engineer. <p>TE-6 If noise levels from construction exceed 60 decibels (dB) at the edge of the TCE (110 feet from the edge of the bridge zone), then a sound barrier/blanket will be erected to minimize construction noise impacts.</p>
Invasive Species	If the proposed project is not built, there would be no impacts related to invasive species.	Both build alternatives would have a net positive impact due to invasive species removal. During construction, it is likely that invasive species would be removed and replaced by native plants since Caltrans does not use invasive species for its erosion control or for its landscaping. Avoidance and minimization measures are recommended.	IS-1 In compliance with Executive Order (EO) 13112 regarding Invasive Species as well as guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control included in the project will not use species listed as invasive. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.
Construction Impacts	If the proposed project is not built, there would be no construction impacts	The build alternatives would affect the various environmental resources around the project site during construction. Measures will be implemented to minimize the impacts of construction as much as possible. No permanent adverse impacts are expected for any environmental resources from the construction of the new Trancas Creek Bridge with the implementation of avoidance, minimization and mitigation measures.	<p>CI-1 Runoff control measures shall be placed at the top of all excavation and embankment slopes.</p> <p>CI-2 Whenever possible, every effort shall be made to schedule work inside the Trancas Lagoon and earth-disturbing activities outside of anticipated rain events.</p> <p>CI-3 Slope protection/slope interruption devices shall be implemented on applicable slopes during the construction period. Wherever possible, early implementation of permanent erosion control seeding or landscape planting shall be performed.</p> <p>CI-4 The Contractor shall provide and maintain stabilized construction site entrances and exits throughout.</p> <p>CI-5 Regular watering of non-paved sites along with regular street sweeping and vacuuming of paved surfaces</p> <p>CI-6 All slopes shall be protected with fiber rolls, silt fences, temporary slope drains, and early slope paving or</p>

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			<p>landscaping as defined in the approved Storm Water Pollution Prevention Plan (SWPPP), especially during the rain season from October 1 to May 1.</p> <p>CI-7 The total active disturbed soil area within the proposed project limits will be maintained to a minimum by focusing on construction activities that avoid earthwork and by implementing the approved construction site Best Management Practices (BMPs).</p> <p>CI-8 The contractor will be required to manage all stockpiles against wind and water erosion and contain concrete wastes with concrete washouts.</p> <p>CI-9 All catch basins and drainage inlets will include gravel bag berms or storm drain inlet protection.</p> <p>CI-10 For all construction equipment, fuels, and toxic chemical spills, prevention and spill control measures will be implemented throughout construction.</p> <p>CI-11 No heavy construction equipment shall be stored on the beach zone. All heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in a non-operating status.</p> <p>CI-12 A wash-out pan should be used to wash down any equipment that handles concrete or other chemical-based construction materials.</p> <p>CI-13 All construction activities are to occur between the hours of 6:00 a.m. and 9:00 p.m., and shall not exceed 86 A-weighted decibels (dBA) at a distance of 50 feet. No construction activity is expected to occur on Sundays or on legal holidays. Construction noise will comply with the City of Malibu noise ordinance.</p> <p>CI-14 During bird nesting season (February 15 to September 1), Pre-project Bird Nesting Surveys will be conducted prior to any clearing and grubbing activity. If feasible within the project's schedule and timing, perform clearing and grubbing activity during the non-bird nesting period (September 2 to February 14).</p>

Table S.1 Summary of Potential Project Impacts

Environmental Resource	Alternative 1: No Build	Alternatives 2 and 3: Build Alternatives	Avoidance, Minimization, and/or Mitigation Measures
			CI-15 All equipment entering and exiting riparian and/or wetland areas must be washed down before and after daily operation to remove any potential nonnative or invasive seeds or soil that may contain invasive species.

BMP = best management practice
 Caltrans = California Department of Transportation
 CNPS = California Native Plant Society
 PCH = Pacific Coast Highway
 RSP = rock slope protection
 SWPPP = Storm Water Pollution Prevention Plan
 TCE = temporary construction easement

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Chapter 1 Project Description

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to improve the safety of Pacific Coast Highway (PCH) by replacing the Trancas Creek Bridge (Bridge No. 53-0027) in the City of Malibu, Los Angeles County, California. The bridge traverses north to south over Trancas Creek just north of Zuma Beach, between Trancas Canyon Road and Guernsey Avenue. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

State Route 1 (SR-1 or Pacific Coast Highway [PCH]) is a major north-south travel corridor that runs along most of the Pacific coastline in California. Originating near the town of Leggett in Mendocino County, PCH extends on and off to the City of Dana Point in Orange County. Because of the highly scenic and coastal nature of PCH, parts of the highway are designated as an All-American Road or are protected under the National Scenic Byways Program. In addition to providing a scenic route to numerous attractions along the coast, the route also serves as a major thoroughfare in the Greater Los Angeles Area, the San Francisco Bay Area, and several other coastal urban areas.

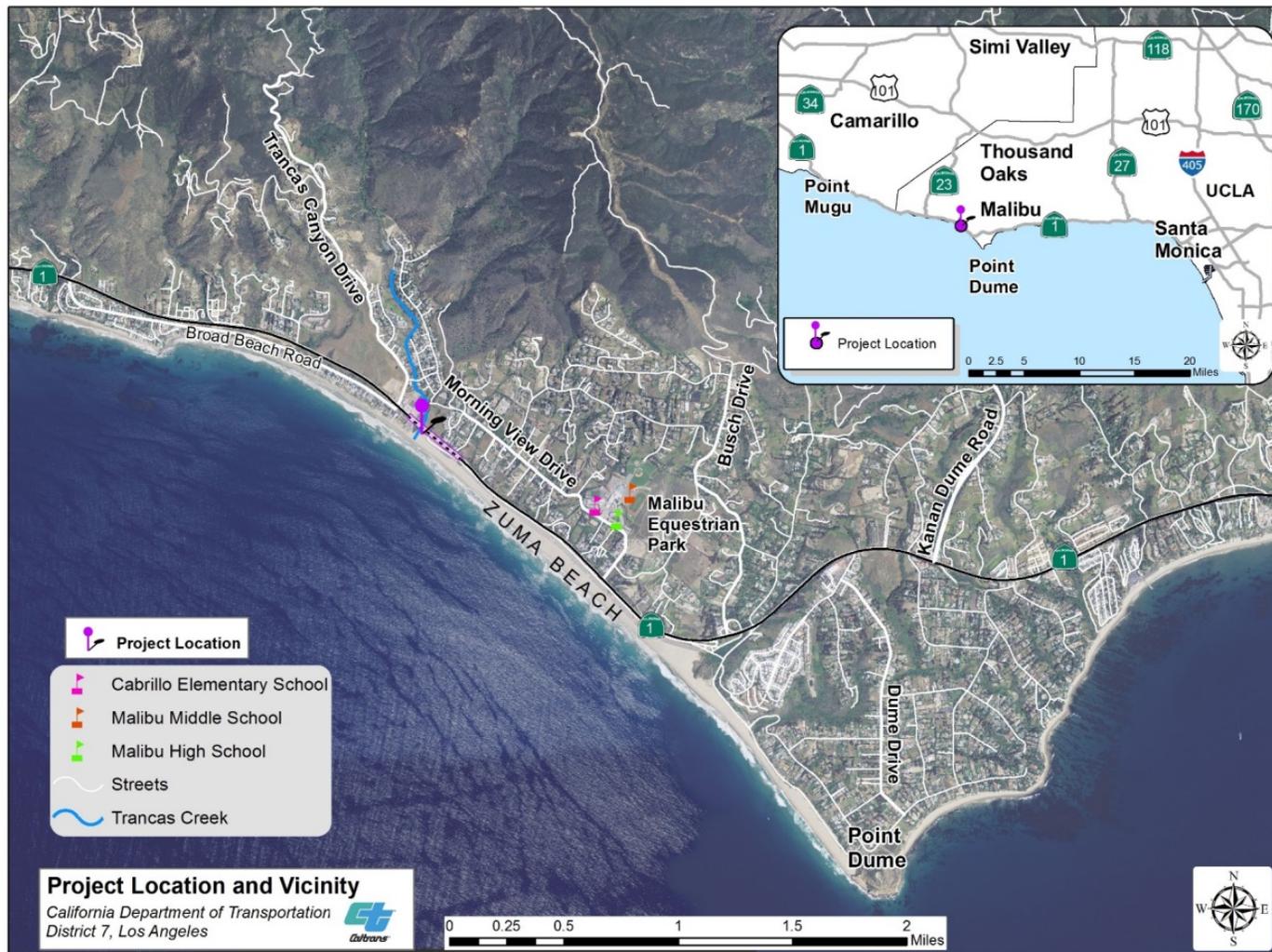
The proposed project exists within a portion of PCH that serves as the main thoroughfare of the City of Malibu. The roadway in the project limits consists of two lanes each direction and a Class II bike path next to the southbound shoulder of the highway. Figure 1-1 shows the location and the vicinity of the proposed project.

1.2 Purpose and Need

The purpose of the proposed project is to achieve the following objectives:

- **To provide the traveling public with a reliable and safe Trancas Creek crossing that will facilitate travel in the City of Malibu.**
- **To provide opportunities for multimodal travel on PCH.**

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Aerial Source: USDA, NAIP Imagery 2012.

Map Created by Robert Wang, Division of Environmental Planning, April 10, 2017

Figure 1-1 Project Location and Vicinity

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The proposed project is needed because:

- **The existing bridge has served long beyond its original design lifespan.**

The bridge was built in 1927, and widened in 1938 and 1954 with a design life span of 50 years; it is currently 90 years old. Failure to replace the bridge would result in continued deterioration and the need for continued maintenance. It could also put the traveling public in immediate jeopardy if the bridge should fail and leave the City of Malibu without a viable north-south transportation route.

- **The existing bridge has a history of scour¹-related issues.**

The existing bridge has exhibited a history of scour-related issues over the years. In 1967, heavy storm runoff caused the embankment behind the northeast wing wall to erode. In 1969, the creek channel had to be regraded to divert water under the center span of the bridge, and the channel banks were graded and diked to divert water away from the wing walls and the abutments (see Figure 1-2 for identification of typical bridge components). And in 1998, there was erosion, once again, behind the northeast wing wall; this time, rock riprap² was installed to protect the bridge.

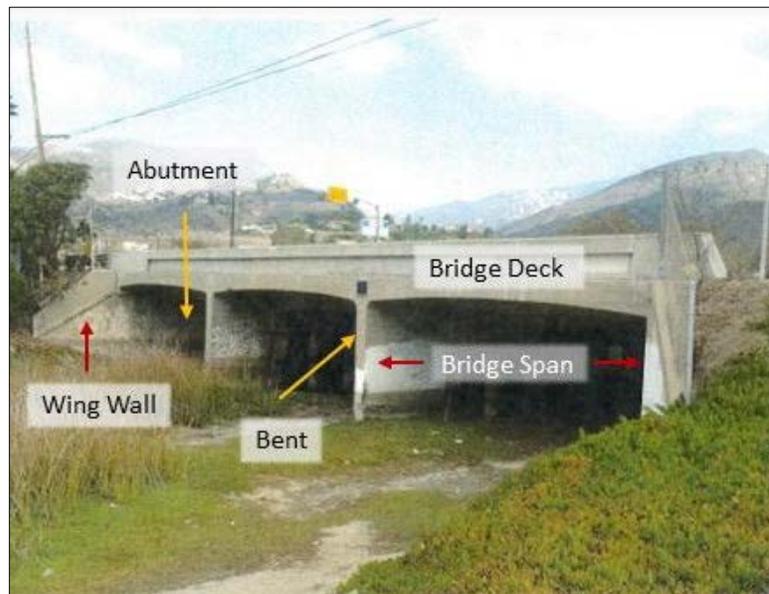


Figure 1-2 Typical Bridge Components

¹ Scour: Erosion caused by moving water.

² Riprap: Randomly placed rock or concrete used to strengthen an embankment or protect it from erosion.

Additional scour concerns led Caltrans to install a tilt sensor monitoring system on the bridge in 2011 to provide notification in case the bridge shows signs of shifting and potential failure. This situation could occur because flowing water in Trancas Creek typically approaches the bridge at anywhere from a 15- to 50-degree angle. A scour analysis performed by Caltrans' hydrologists in 2012¹ determined that Bents 2 and 3 could potentially be undermined by 2 feet as a result of a 2-year storm event. It also concluded that Bent 2 could potentially be undermined by as much as 3 feet during a 5-year storm event.

The potential for scour was calculated in accordance with Federal Highway Administration (FHWA) Technical Advisory T5140.23, "Evaluating Scour at Bridges." The bridge's vulnerability to scour was given a rating level of 3 (i.e., bridge is scour critical; bridge foundations determined to be unstable for assessed or calculated scour condition). The recommendation was to replace the bridge.

- **The existing bridge has structural deficiencies.**

Because of the relentless vibration resulting from vehicles passing over it and the periodic battering received from severe storms (water and debris), substantial damage has occurred to the substructure of the bridge over the years. A *Bridge Inspection Report* prepared at the end of 2015 identified numerous problem areas, including:

- Large, severe, and continuous vertical cracks on the outer portions of Bents 2 and 3 where they are most exposed to being hit by heavy storm flow and debris.
- Moderate to severe vertical cracks on the interior portions of Bent 3.
- Severe and continuous vertical cracks on the Abutment 4 wall.
- Small diagonal cracks running along the westerly corner of Abutment 4.
- Small, medium, and large spalling (ranging in size from 12 inches x 3 inches x 1 inch up to 16 feet x 8 inches x 3 inches) at several locations on Bent 2, Bent 3, Abutment 4, the northwest wing wall, and the underside of Bridge Span No. 2.

The severity of this damage to the substructure of the Trancas Creek Bridge contributes to the need for it to be replaced.

¹ California Department of Transportation. 2012. *Bridge Inspection Report*.

- **The existing bridge is not wide enough to avoid conflicts between motorists and bicyclists.**

In this section of Malibu, PCH currently has 8-foot-wide outside shoulders along both the northbound and southbound lanes. There is also a 6-foot-wide Class II bike lane (installed by the City of Malibu in 2015) between the southbound travel lanes and the shoulder. The Trancas Creek Bridge is narrower than the paved roadway on either side, and the bike lane occupies more than half the shoulder. Many times the shoulders are occupied by parked cars, thereby forcing bicyclists into the travel lanes and creating potentially dangerous conflicts with cars and trucks. Widening the bridge and the adjacent roadway is needed to relieve the bicycle/vehicle conflicts.

1.2.1 Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR 771.111(f)]) require that this evaluation of the proposed undertaking connects logical termini, and is of sufficient length to address environmental matters on a broad scope. Further, 23 CFR 771.111(f) stipulates that the proposed project must have independent utility or independent significance in that it be usable and a reasonable expenditure of funds even if no additional transportation improvements are made in the area. Lastly, it stipulates that the proposed project does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

The proposed project is a standalone project intended to ensure the safety and reliability of the traveled roadway on PCH at the Trancas Creek Bridge in the City of Malibu. The proposed project is independent of other Caltrans projects on PCH and its purpose and need cannot be fulfilled by any other Caltrans project. Furthermore, the proposed project is in no way dependent on the implementation of other Caltrans projects on PCH prior to or subsequent to this proposed undertaking. This environmental document studies the entire project area and is in no way dependent on the environmental document or mitigation proposals of any other project. Lastly, the proposed project does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. Based on the aforementioned, and pursuant to 23 CFR 771.11(f), this project has independent utility and logical termini.

1.3 Project Description and Alternatives

This section describes the proposed action and the project alternatives that were developed to meet the identified purpose and need of the project while avoiding or minimizing environmental impacts. The alternatives are Alternative 1 – No Build,

Alternative 2 – Short Bridge Replacement, and Alternative 3 – Long Bridge Replacement.

The existing Trancas Creek Bridge is 97 feet long by 85 feet wide and has three spans (two piers in Trancas Creek). The bridge and adjacent roadway have two lanes in each direction separated by a raised median that varies in width between 4 feet and 16.5 feet. There are also 8-foot outside shoulders in each direction. This portion of southbound PCH is striped as a Class II bikeway.

The proposed project would replace the existing bridge with one that meets current safety standards. Both Alternatives 2 and 3 would require widening the bridge and the approaches on either side by as much as 9 feet on the southbound side, out to the current right-of-way line. The existing raised median would be reduced to a 6.5-foot raised curb median island in order to provide 5-foot median shoulders in each direction. They would also be designed with standard 11-foot lanes, a standard 8-foot northbound shoulder, and a southbound shoulder that is 14 feet wide to accommodate a 6-foot bicycle and pedestrian use. Temporary and permanent right-of-way would need to be acquired. The proposed project is currently funded by the State Highway Operation and Protection Program.

1.3.1 Alternatives

1.3.1.1 Alternative 3 – Long Bridge Replacement (Preferred Alternative)

Under Alternative 3, the existing bridge would be replaced with a new four-span bridge that is 240 feet long and 90.5 feet wide. This length would accommodate and allow the maximum benefits to be achieved by the Trancas Lagoon Restoration Project being proposed by the RCD-SMM.

Three piers, each composed of six 4-foot-diameter columns, would be required to support the longer bridge. For Alternative 3, the bridge would be built at the same height as the existing bridge because the wider opening would allow sufficient room to accommodate the Q50 burned and bulked flow.

The wider opening would also allow for the inclusion of a pedestrian trail under the bridge, adjacent to the southern abutment. The trail would be a 10-foot-wide, 8-foot-high cement path that would be compliant with the Americans with Disabilities Act (ADA) and would connect the lagoon to the beach, thereby allowing people to safely cross the highway without encountering vehicle traffic. The trail would be elevated

above the creek bed but would still be subject to flooding during storms. Signs would caution people against using it during unsafe conditions.

As with Alternative 2, Alternative 3 would include the use of RSP to protect the bridge abutments, the use of aesthetic bridge rails approved by the California Coastal Commission, and the relocation of utility poles to the edge of Caltrans' right-of-way on the southbound side of PCH. Temporary relocation of the residential home 50 feet northwest of the bridge will be required, with the relocation period extending from 3 months to 2 years.

The current estimated cost for Alternative 3 is \$10,960,000. This cost is only an estimate for the planning phase and is subject to change.

1.3.1.2 Alternative 1 – No Build Alternative

The No Build Alternative would retain the existing bridge as-is without any changes. The bridge would continue to be susceptible to scour and, over time, its condition would continue to deteriorate. There would be no improvement in safety for either the motoring public or for the bicyclists who ride along PCH.

1.3.1.3 Alternative 2 – Short Bridge Replacement

Under Alternative 2, the existing bridge would be replaced with a new two-span bridge that is 120 feet long and 90.5 feet wide with the capacity to be lengthened to 240 feet in the future. The southern abutment would be designed and built in a way that would allow the bridge to be lengthened in the future without replacing the entire bridge. This future lengthening could be considered to accommodate and enhance the viability of the Trancas Lagoon Restoration Project being proposed by the Resource Conservation District of the Santa Monica Mountains (RCD-SMM).

The single pier would be constructed using six 4-foot-diameter columns. In order to accommodate the Q50 burned and bulked flow (the water and debris resulting from a 50-year storm event after the watershed has burned), the bridge would need to be raised 2.5 feet above its current height. This would require that the roadway profile be raised gradually beginning about 215 feet south of the bridge and 265 feet north of the bridge.

Retaining walls would be used to support the elevated roadway without the need for sloped embankments, which would require the acquisition of additional right-of-way. The walls would extend to approximately 265.85 feet south of the bridge and approximately 261.15 feet north of the bridge.

Driveways leading into the Trancas Country Market, the residences adjacent to PCH and the Zuma Beach parking lot would be graded to adjust for the increased height of the road. One residential home around 50 feet away from the bridge will need to be acquired due to its close proximity to the bridge. The access to the residential home will be permanently impacted by retaining walls supporting the bridge profile raise.

Additional features of Alternative 2 include the use of rock slope protection¹ (RSP) to protect the bridge abutments, the use of aesthetic bridge rails approved by the California Coastal Commission, and the relocation of utility poles to the edge of Caltrans' right-of-way on the southbound side of the road.

The current estimated total cost for Alternative 2 is \$38,930,000. This cost is only an estimate for the planning phase and is subject to change.

1.3.1.4 Alternatives Summary

Table 1.1 provides a brief summary of the features of each alternative under consideration.

1.3.1.5 Identification of the Preferred Alternative

Caltrans, as the lead agency under NEPA assigned by FHWA, has identified Alternative 3 – Long Bridge Replacement as the Preferred Alternative. The decision was made after comparing and weighing the benefits and impacts of the feasible alternatives and taking into account the public comments received during Draft Initial Study/Environmental Assessment circulation. The selected alternative will replace the existing 97-foot-long, 85-foot-wide, three-span bridge with a new 240-foot-long, 90.5-foot-wide, four-span bridge. In this alternative, the roadway profile will remain as is and will have the capacity to satisfy the LACDWP 50-year storm bulked and burned event vertical clearance requirement under the bridge.

Deciding Factors in the Identification of the Preferred Alternative

The following section will go over the factors for supporting the Preferred Alternative. Please note the following list does not represent the order of importance associated with the selection of the Preferred Alternative.

¹ The placement of rock on the surface of the soil to protect against wind and water erosion and buttress the slope against lateral movement. When used in conjunction with an underlying geosynthetic fabric, rock slope protection may also be an effective vegetation control.

Table 1.1 Summary of Alternative Features Under Consideration

Bridge Improvements	Alternative 1 – No Build	Alternative 2 – Short Bridge Replacement	Alternative 3 – Long Bridge Replacement (Preferred Alternative)
Lengthen bridge to 120 feet (w/design features to facilitate future lengthening)	No	Yes	No
Lengthen bridge to 240 feet	No	No	Yes
Widen bridge and approaches to right-of-way line on southbound side (up to 9 feet)	No	Yes	Yes
Striping of a Class II bike lane on southbound side	Yes	Yes	Yes
Height of bridge	Same as existing	2.5 feet above existing	Same as existing
Elevate roadway approaches to bridge	No	Yes	No
Retaining walls to support approaches to bridge (adjacent to all four corners)	No	Yes	No
Pedestrian trail under bridge (along southern abutment)	No	No	Yes
Relocate utility poles to edge of southbound right-of-way	No	Yes	Yes
Include rock slope protection (RSP) to protect bridge abutments	No	Yes	Yes
Include California Coastal Commission-approved bridge rails	No	Yes	Yes
Permanent and temporary right of way acquisition	No	Yes	Yes
Permanent and temporary relocation of persons	No	Permanent	Temporary
Current estimated cost:	\$0	\$6,500,000	\$10,960,000

Note: Standard Dimensions:

- Shoulder: 8 feet
- Travel Lane on Highways: 12 feet
- Bike Lane: 6 feet
- Multilane Conventional Highway Median: 12 feet

Relocation and Real Property Acquisition Factors

Alternative 2 will require the permanent acquisition of a residential home around 50 feet northwest of the bridge while Alternative 3 will not require the permanent acquisition of the property. This is because Alternative 2 will require raising the profile of the bridge by 2.5 feet, which will require retaining walls on all sides to support the elevation raise. The retaining walls will begin at the bridge structure and extend to around 250 feet away on all sides, effectively blocking the access to the residential property that is closely located to the existing bridge structure.

Alternative 3 will still require the relocation of the residential home; however, the relocation will be temporary in nature since the access to the home will not be

blocked by retaining walls. Because of this, Alternative 3 will have a lesser impact on the local community and the private property owner.

Economic and Fiscal Factors

The current cost estimates for Alternative 2 – Short Bridge Replacement is \$38,930,000 as compared to Alternative 3 – Long Bridge Replacement at \$10,960,000. The higher cost for Alternative 2 is primarily due to the permanent right-of-way acquisition of a residential home to the northwest of the bridge. The lower cost of Alternative 3 makes the Preferred Alternative the more desirable and cost-effective option between the two Build Alternatives.

Natural Resource Factors

The longer span bridge will provide the necessary hydrological dynamics for the opportunity to restore the Trancas Lagoon that was historically present under the Trancas Creek Bridge. The wider opening of the bridge mouth will allow for an increased level of hydrologic flow during normal and above-normal storm events, thus providing more opportunity for creek breaches to the ocean and greater tidal influence. The breaching of the creek is also essential for the return of the southern steelhead trout that has historically appeared within the streams of Trancas Creek. The increased level of hydrologic flow and ponding area will also create new wetland habitat for the local wildlife at the lagoon. Alternative 2 will not be able to provide the increased level of hydrologic flow or ponding area for the new wetlands due to its narrow bridge opening.

Multi-Modal Transportation Factors

The Preferred Alternative will be able to accommodate a bicycle/pedestrian trail crossing under the bridge during heavy rain seasons as desired by the City of Malibu and the general public, based on the comments received. This trail will provide additional recreational opportunity for the residents around the Trancas Lagoon and Zuma Beach. This trail is a benefit that the design of Alternative 2 cannot accommodate.

Conclusion and Identification of the Preferred Alternative

After weighing all the factors studied in this document and listed above, and taking into account the public comments that were received, Alternative 3 has been determined to be the Preferred Alternative for the Trancas Creek Bridge Replacement Project. This is the alternative the lead agency believes would fulfill its statutory

mission and responsibilities, giving consideration to social, economic, environmental, technical, and other factors.

1.3.1.6 Alternatives Considered but Eliminated from Discussion

During an earlier phase of this project, Caltrans considered replacing the existing Trancas Creek Bridge with a new 120-foot-long bridge, similar to what is currently proposed as Alternative 2. However, that alternative did not include features that allowed for future lengthening and was removed from consideration because it would have restricted the viability of the future Trancas Lagoon Restoration Project.

1.4 Permits and Approvals

The following permits, reviews, and approvals would be required prior to construction of the proposed project:

- Approval of the Initial Study/Environmental Assessment
- Adoption of Mitigated Negative Declaration/Finding of No Significant Impact
- Proposed project approval (Project Report)
- Los Angeles County Department of Beaches and Harbors Encroachment Permit
- Los Angeles County Department of Beaches and Harbors 4(f) Concurrence
- United States Army Corps of Engineers Clean Water Act Section 404 Permit
- Regional Water Quality Control Board Clean Water Act Section 401 Certification
- California Department of Fish and Wildlife Section 1602 Streambed Alteration Agreement
- City of Malibu Coastal Development Permit
- Other nondiscretionary permits required for construction

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Chapter 2 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

The analyses discussed are based on supporting technical studies and analysis and other reference materials not attached to this document. They are available for examination and copying at the following address:

California Department of Transportation
District 7, Division of Environmental Planning
100 South Main Street
Los Angeles, CA 90012

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered for this project, but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

- **Farmlands/Timberlands:** The proposed project is located in a suburban setting and construction work will be focused on the existing roadway facilities. Any components that would not occur within existing infrastructure and right-of-way would occur on lands that are currently adjacent to freeway facilities with no potential for direct or indirect irreversible conversion of protected farmlands or timberlands. Furthermore, there are no farmlands or timberlands within the project vicinity.
- **Growth:** The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, requires evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA guidelines (Section 15126.2[d]) require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

This project does not propose to modify existing highway capacity, operation or accessibility. This project has no potential to influence growth.

- **Paleontology:** A preliminary investigation indicated that paleontological resources are not likely to be present within the project area. Therefore, no paleontological impacts are anticipated.
- **Wild and Scenic Rivers:** Projects affecting Wild and Scenic Rivers are subject to the National Wild and Scenic Rivers Act (16 United States Code ([USC] 1271) and the California Wild and Scenic Rivers Act (CA Public Resources Code [PRC] Section 5093.50 et seq.). No Wild and Scenic Designated rivers exist within the project study area.

HUMAN ENVIRONMENT

This section describes the existing land uses in the project area, characterizes surrounding uses, and summarizes current planning activities in the project area. This analysis focuses on land use compatibility and impacts associated with the implementation of the project.

2.1 Land Use

The City of Malibu (City) is located along the Pacific Ocean northwest of the City of Los Angeles. The City is generally bounded on the north by the Santa Monica Mountains, on the east by Topanga Canyon, on the west by Ventura County, and on the south by the Pacific Ocean. The City was incorporated on March 28, 1991.

The Malibu area was settled in the 1890s by the Rindge Family, which owned a large ranch called Rancho Topanga Malibu Sequit. The land's remote location between the ocean and the mountains led to the current small-town residential community development pattern. Malibu has remained a primarily residential community over the past few decades. Commercial areas are limited to small neighborhood-serving and visitor-serving uses interspersed throughout the City, but located primarily in the Civic Center area and the Point Dume area.

Prior to incorporation, the County of Los Angeles dictated development policies in the area. Many of the newer cities in Los Angeles County have experienced phenomenal growth in the past few decades. Although Malibu also experienced growth, the growth in the City does not compare with the growth of other cities in northern Los Angeles County. The citizens of Malibu, recognizing the need to protect the unique natural resources of the area and retain the rural feeling, have attempted to secure local control over growth through cityhood several times between 1964 and 1991.

2.1.1 Existing and Future Land Use

The City has mostly retained its rural residential characteristic. The built environment is dominated by residential land use, which represents 22 percent of the total land used in the City (Table 2.1), the largest land use category in the City. Multifamily residential homes tend to cluster around the sides of Pacific Coast Highway (PCH), while single-family homes are spread out in the hills.

Commercial land use comprises merely 1.5 percent of the total land use (Table 2.1) in the city. Small businesses (e.g., real estate, law firms, and medical practices)

Table 2.1 Existing Land Uses

Land Use Type	Number of Units	Number of Acres	Percentage of Land	
			Total	Type
Residential				
Single-family	4,024	2,429.9	19.4	89.8
Multifamily (including all attached units)	911	175.3	1.4	6.5
Mobile homes	688	101.8	0.8	3.8
Residential Subtotal	5,623	2,707.0	21.6	100.0
Commercial				
Retail stores and commercial services		144.9	1.2	78.4
Commercial recreational (bowling alleys, roller rinks, miniature golf, isolated driving ranges, amusement parks, commercial stadia, fairgrounds, gambling facilities, drive-in movie theaters, indoor shooting ranges, and horse and car racing facilities)		40.0	3.1	21.6
Commercial Subtotal	769,000 sf	184.9	1.5	100.0
Research and Development				
		17.7	0.2	100.0
Public and Semi-Public Facilities				
Includes uses such as emergency communications and services, libraries, museums, maintenance yards, educational (private and public) and religious institutions, community centers, parks and recreational facilities, and governmental facilities including police and fire stations		169.4	1.3	100.0
Horticulture				
Includes irrigated and non-irrigated cropland, improved pasture land, orchards, vineyards, nurseries, dairies, livestock, poultry, and other agriculture		24.8	0.2	100.0
Open Space				
Includes regional and local parks, wildlife preserves, arboreta, beach parks, and open space/recreation		1,869.9	14.9	100.0
Vacant				
Includes land reserved or dedicated for open space		7,578.3	60.4	100.0
Total Land Use Acreage		12,552	100.0	100.0

Source: City of Malibu General Plan. Website: <http://www.qcode.us/codes/malibu-general-plan/>, accessed in February 2017.
sf = square feet

concentrate on the sides of PCH in Malibu, but only as neighborhood-serving enterprises. The local employment base remains focused in a few major employers (e.g., the Hughes research facility) and Pepperdine University, which is outside the City. Many residents commute to Santa Monica, Los Angeles, the San Fernando Valley, or Ventura County for employment.

The non-built environment is dominated by vacant land that comprises a significant 60.4 percent of the land in Malibu. While Malibu is characterized by vast amounts of

vacant land, only a small portion of that land is suitable for development because of a variety of natural factors. These factors include steep hillsides, unstable soil and subsurface conditions, extreme fire hazard, and sensitive environmental resources.

Other land uses in Malibu include Open Space (15 percent), Horticulture (0.2 percent), and Public and Semi-Public Facilities (1.3 percent) (Table 2.1). These include private and publicly owned lands serving local agencies (e.g., public parks, schools, government, police and fire stations, libraries, and water treatment facilities).

Prior to incorporation, land use planning in the City was governed by the Malibu Land Use Plan (LUP) and the County of Los Angeles Zoning Ordinance. The existing distribution and extent of development in Malibu is a reflection of the planning practices of both the County of Los Angeles and the California Coastal Commission. For a visual representation of the current land use map, refer to Figure 2-1 and Figure 2-2.

2.1.1.1 Project Study Area

The areas in the immediate vicinity of the proposed project will experience the most effects during construction, but will also likely see the most improvement after completion. For the purpose of the land use study, the project study area has been determined to be a 3,000-foot radius around the project footprint (Figure 2-3).

The immediate area around the proposed project is comprised of a mix of land uses, including open land, vacant land, commercial, recreational, and residential land uses. To the southeast of the project site is open land occupied by Zuma County Beach and the Pacific Ocean. To the northwest of the project site is vacant land where the Trancas Creek flows through and under the Trancas Creek Bridge onto Zuma County Beach on the west side, and, when the sand berm is breached, eventually connects with the Pacific Ocean. The City of Malibu General Plan Land Use Map shows an indication to create a Trancas Canyon trail that would travel under the Trancas Creek Bridge from the northeast (inland) side to the southwest (beach) side (Figure 2-3). However, such a trail does not yet exist below the Trancas Creek Bridge. The Trancas Country Market is located to the northeast of the project site, with small businesses and a local-serving grocery store, a bank, and cafés. Residential development scatters around the project site to the northwest and southeast.¹

¹ California Coastal Commission. Website: <https://www.coastal.ca.gov/ventura/malibu-maps-final.pdf>, accessed March 27, 2017.

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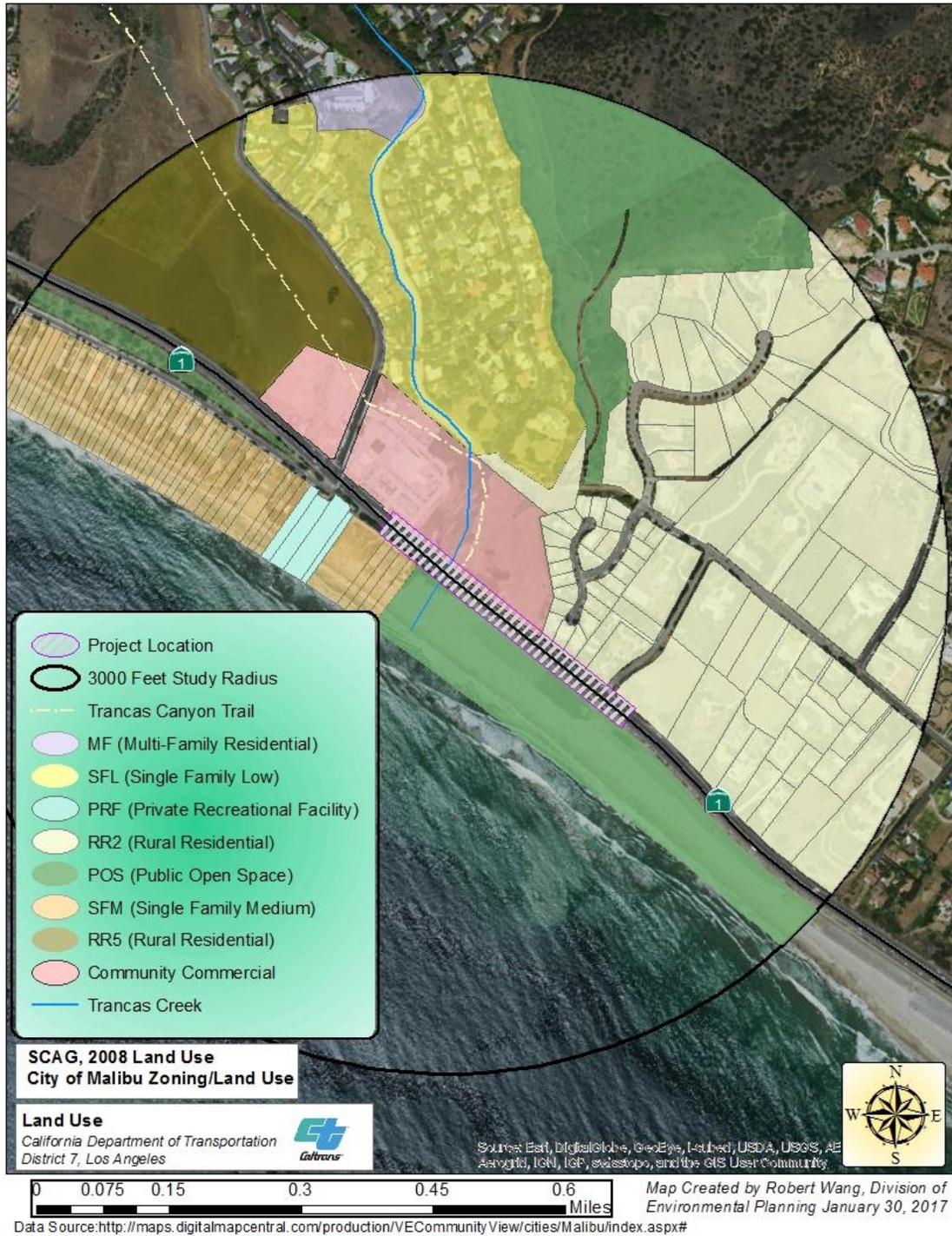


Figure 2-3 Land Use Project Study Area

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2.1.1.2 Development Trends

The City experienced substantial growth from 1980 to 1990, when the population increased from 10,172 to 11,116, an increase of 9.3 percent. However, this trend has slowed due to development constraints incorporated by the City to prohibit significant future growth. A moratorium on all development with exceptions applying to single-family units expired on March 28, 1993. From 2000 to 2010, the population increased from 12,511 to 12,645, a small increase of 1.07 percent. However, in the same period, housing units in the City saw a roughly 12 percent increase, from 6,126 units in 2000 to 6,864 units in 2010, an increase of 738 units.

2.1.2 Consistency with Relevant State, Regional, and Local Plans and Programs

2.1.2.1 Federal Transportation Improvement Program (FTIP) and the 2017 Regional Transportation Plan (RTP)

The FTIP is a listing of all transportation projects proposed over a six-year period for the Southern California Associations of Governments (SCAG) region. SCAG encompasses six counties, including Los Angeles County, and includes 191 cities. The RTP, which was most recently updated in 2016, is a long-range vision plan developed by SCAG. The RTP outlines more than \$556.5 billion in transportation system investments through 2040 and charts a course for closely integrating land use and transportation to help the region grow effectively and sustainably. The proposed project is included in and consistent with both the FTIP and the RTP.

2.1.2.2 Los Angeles County General Plan (2035)

The Los Angeles County General Plan provides the long-term physical development and conservation policy framework for the unincorporated areas of Los Angeles County. The unincorporated areas of Los Angeles County account for an estimated 2,650 square miles (more than two-thirds of Los Angeles County's land), with over 1 million people residing in these areas. Unincorporated areas are grouped into 137 noncontiguous areas that vary in shape and size, both in terms of land and population. The goal of the Los Angeles County General Plan is to foster healthy, livable, and sustainable communities in the unincorporated areas of Los Angeles.

The framework of the Los Angeles County General Plan is provided through the establishment of principles, planning areas, policy elements, and implementation programs. The framework is provided as a guide to how and where the unincorporated areas will grow through the year 2035. These guidelines are laid out through established goals, policies, and programs.

The Los Angeles County General Plan identifies 11 planning areas, with the project site existing in the Santa Monica Mountains planning area. Six identifications of opportunity area types are included in the Los Angeles County General Plan and these identifications are listed in Table 2.2.

Table 2.2 Opportunity Area Types

Opportunity Area Types	Description
Transit Centers	Areas that are supported by major public transit infrastructure. Transit centers are identified based on opportunities for a mix of higher intensity development, including multifamily housing, employment and commercial uses; infrastructure improvements; access to public services and infrastructure; playing a central role within a community; or the potential for increased design, and improvements that promote living streets and active transportation, such as trees, lighting, and bicycle lanes.
Neighborhood Centers	Areas with opportunities suitable for community serving uses, including commercial only and mixed-use development that combine housing with retail, service, office, and other uses. Neighborhood centers are identified based on opportunities for a mix of uses, including housing and commercial; access to public services and infrastructure; playing a central role within a community; or the potential for increased design, and improvements that promote living streets and active transportation, such as street trees, lightening, and bicycle lanes.
Corridors	Areas along boulevards or major streets that provide connections between neighborhoods, employment, and community centers. Corridors are identified based on opportunities for a mix of uses, including housing and commercial; access to public services and infrastructure; playing a central role within a community; or the potential for increased design, and improvements that promote living streets and active transportation, such as trees, lighting, and bicycle lanes.
Industrial Flex Districts	Industrial areas that provide opportunities for non-industrial uses and mixed uses, where appropriate, and also light industrial or office/professional uses that are compatible with residential uses.
Industrial Opportunity Areas	Economically viable industrial and employment-rich lands located in an unincorporated community that has an adopted community-based plan, or is in the process of creating one. Future considerations should be given to these areas to be mapped as Employment Protection Districts, where industrial zoning and industrial land use designations should remain, and where policies to protect industrial land from other uses (residential and commercial) should be enforced.
Rural Town Centers	Focal points of rural communities, serving the daily needs of residents and providing local employment opportunities. Rural town centers are identified based on the opportunities for new public facilities and new commercial uses.

Source: County of Los Angeles General Plan. 2014. Website: http://planning.lacounty.gov/assets/upl/project/gp_2035_Chapter5_2014.pdf, accessed February 2017.

The proposed project is adjacent to the Santa Monica Mountains Planning Area in the incorporated City of Malibu (1991). While Malibu is an incorporated city, the Los Angeles County General Plan still has certain influences over the area (e.g., school districts and tax revenue). The closure of this roadway will lead to a detour that is at least 3 miles in additional travel miles for the traveling public. Because the project is on a fairly isolated segment of the highway, the connectivity of this roadway has a

significant effect on the regions to the north and south of this project beyond the communities immediately adjacent to the project site. Maintaining a safe and reliable roadway prism at this segment of the roadway will ensure the economic viability and accessibility of the regions connected by PCH.

2.1.2.3 Malibu General Plan

The Malibu General Plan is the principal policy document for guiding future development in the City and all land use and zoning maps and diagrams need to be consistent with the General Plan. The Malibu General Plan Land Use Element is designed to promote a balanced and functional mix of land uses, guide public and private investment, reflect land use opportunities and constraints identified in other General Plan elements, and reduce hazards. The promotion of these values is done through the incorporation of land use data necessary to understand the current land use needs; with other elements, identify issues and constraints confronting future development; establish goals, objectives, and policies; and identify implementation programs to guide the long-term physical growth of the community.

The Land Use Element divides the City into 18 different neighborhood areas. The proposed project falls within the Trancas Canyon area, which serves as a dividing line between the higher-density neighborhoods of Malibu West and Malibu Park and the lesser-dense neighborhood area of West Malibu. The Trancas Creek Bridge Replacement project will provide the traveling public in the City with a reliable thoroughfare that is essential to the social and economic vibrancy of the local community. The shortest existing detour around this roadway is more than 3 miles long.

2.1.3 Coastal Zone Management Programs

2.1.3.1 Regulatory Setting

This project has the potential to affect resources protected by the Coastal Zone Management Act of 1972 (CZMA). The CZMA is the primary federal law enacted to preserve and protect coastal resources. The CZMA sets up a program under which coastal states are encouraged to develop coastal management programs. States with an approved coastal management plan are able to 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 for the CZMA: 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 beauty; 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 CZMA 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 (LCPs). LCPs determine the short- and long-term use of coastal resources in their jurisdiction consistent with the California Coastal Act goals. A federal consistency determination may be needed as well.

Local Coastal Program

The California Coastal Act requires each community in the coastal zone to prepare an LCP, including a coastal Land Use Plan (LUP) to protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural resources. An LCP consists of land use plans, zoning ordinances, and zoning district maps. LCPs must contain a specific public access component to assure maximum public access to the coast and ensure that public recreation areas are provided.

The entire City is located in the coastal zone as defined by the California Coastal Act. The coastal zone boundaries extend several miles north of the City limits. Portions of this area represent land Malibu may seek to annex as its Sphere of Influence in the future. In addition to the coastal and marine resources, significant natural terrestrial resources are located both within the City boundaries and the coastal zone. Some of the habitat areas in the coastal zone are adjacent to the City boundaries. Hence, the City has a significant interest in protecting and preserving these resources.

The City has a completed General Plan and a Certified LCP, including the Malibu LUP and Local Implementation Plan (LIP). The Malibu LUP will reflect the goals and preferences of the City as set forth in its General Plan. In addition, many of the issues addressed in the General Plan are also addressed in the Malibu LUP and the City's zoning ordinance.

2.1.3.2 Affected Environment

Location of Project within the Coastal Zone

The Trancas Creek Bridge crosses over Trancas Creek, which pools into a lagoon under and upstream of the bridge. During the summer, the Trancas Creek flow is low and typically does not reach the ocean. However, during the rainy winter season, it occasionally breaches the naturally occurring sand berm on the beach to reach the Pacific Ocean. The lagoon size and creek flow are limited to the size of the opening below the bridge structure.

The area in the immediate vicinity of the bridge consists of the beach, vegetated areas (riparian, wetland, upland), and residential/commercial development. Figure 2-4 depicts the location of the Trancas Creek Bridge in the coastal zone.

2.1.3.3 Environmental Consequences

Impacts within the Coastal Zone

No Build Alternative – Alternative 1

If the proposed project is not built, there will be no coastal zone impacts.

Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Policies within the Malibu Local Coastal Program (MLCP) that pertain to this project are summarized in Table 2.3; the reader is referred to the appropriate section of this document for more information.

The proposed project is not expected to create permanent adverse impact to the local biological environment.

Temporary access impacts during construction will be mitigated by the implementation of traffic control that will ensure the unimpeded flow of traffic on PCH. Refer to the Parks and Recreational Facilities section for more information on potential impacts to Zuma County Beach.

The proposed project is not expected to have a permanent adverse impact on access and recreational resources in the coastal zone. With the widening of the bridge and the roadway to accommodate multimodal transportation, this project is expected to have a positive effect on the accessibility of coastal resources. The use of see-through railings on the bridge will also improve the visual quality of the coastline for the public.

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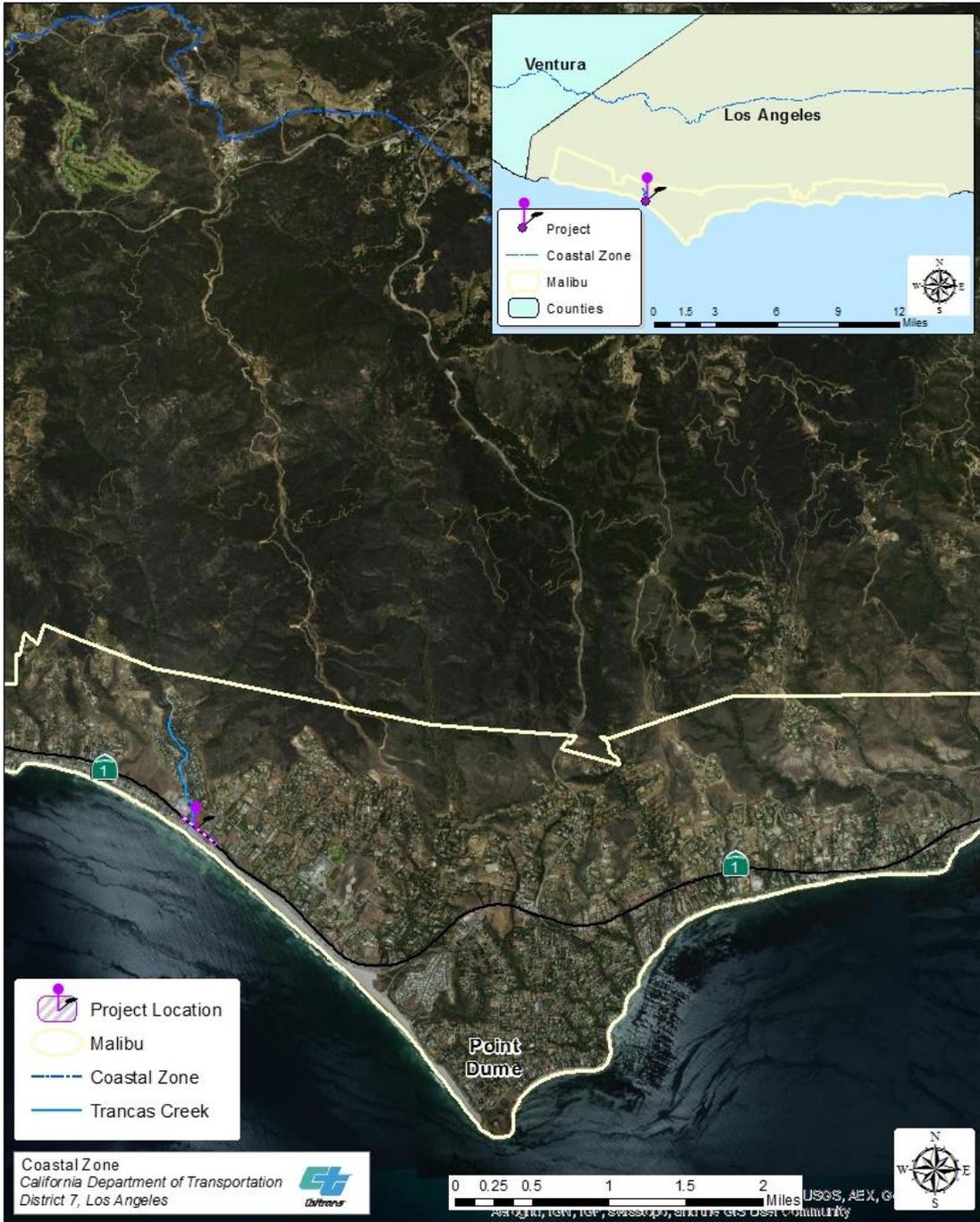


Figure 2-4 Project Location Within the Coastal Zone

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Table 2.3 Build Alternative Consistency with Malibu Local Coastal Program (MLCP)

Policy Chapter in the MLUP, within the MLIP	Subject of Policy	Discussion	For Further Discussion of the Subject within this Document
4	Environmentally Sensitive Habitats	The project footprint encompasses portions of Trancas Creek that meet the criterion for Disturbed Sensitive Resource Area (DSRA) status per the City's General Plan. The DSRA habitat type is defined by the City as "Developed riparian stream corridors; coastal canyons, Pt. Dume, coastal bluffs adjacent to development; coastal wetlands; Zuma, Topanga, Trancas, Arroyo Sequit." Thus, Trancas Creek and its associated riparian vegetation qualifies to be designated an Environmentally Sensitive Habitat Area (ESHA) by the City. Measures are included to avoid impacts to ESHA. <i>Avoidance, minimization, and mitigation measures are recommended.</i> Determinations and appropriate measures will be reviewed by the City during the Local Coastal Development Permit application process.	Sections 2.3.3 through 2.3.6
6	Scenic, Visual, and Hillside Resources	The proposed bridge does not have any expected visual impacts. Incorporation of certain proposed measures may enhance the viewshed for future traveling public (i.e., see through railings). <i>Avoidance and minimization measures and enhancements are recommended.</i>	Section 2.1.5
9	Hazards	The proposed project is susceptible to tsunami, liquefaction, earth quake, and flooding. The design of the proposed bridge will minimize impacts from natural hazards. <i>Avoidance and minimization measures are recommended.</i>	Section 2.2.1, Section 2.2.3
11	Archaeological/Cultural	The proposed project is not expected to impact any cultural resources. <i>Avoidance and minimization measures are recommended.</i>	Section 2.1.6
12	Public Access	Minor temporary impacts to public access of the coast is expected during bridge construction. The capacity of the bridge and adjacent roadway will be reduced from two lanes in each direction to a single lane in each direction. No public access points to Zuma County Beach will be affected by the construction. <i>Avoidance and minimization measures are recommended.</i>	Section 2.1.1
17	Water Quality Protection	The proposed project operations are anticipated to slightly increase runoff volume, but are not anticipated to affect downstream flow, discharge to lined channels, create potential sediment loading, or cause other hydraulic changes to the storm drain system affecting downstream channel stability as a result of increases in Disturbed Soil Areas and net additional impervious areas. <i>Avoidance, minimization, and mitigation measures are recommended.</i>	Section 2.2.2

MLIP = Malibu Local Implementation Plan

MLUP = Malibu Land Use Plan

California Coastal Act

The Trancas Creek Bridge Replacement Project, in addition to being compliant with the City of Malibu's Local Coastal Program, is compliant with the California Coastal Act. Specifically, the sections outlined below were reviewed for consistency and after review, it is determined that the proposed project would be consistent with the applicable goals and polices established in the California Coastal Act. Table 2.4 outlines the applicable sections as they relate to the project.

2.1.4 Parks and Recreational Facilities

Zuma County Beach is a publicly owned recreational facility in the vicinity of the proposed project. Zuma County Beach is located to the southwest of the proposed project and extends for approximately 2 miles along PCH. The popular beach has approximately 2,000 fee parking spaces available for beach visitors and is a popular spot for recreation and filming because of the healthy beach condition. The Zuma County Beach features amenities including lifeguard stations, restrooms, showers, a snack bar, picnic tables, volleyball courts, and a kids' play area. Popular activities at the beach include volleyball, surfing, scuba diving, fishing, swimming, sunbathing, windsurfing, bodysurfing, and bodyboarding. However, this stretch of the beach occasionally has rip currents, which present a hazard to surfers and swimmers.

The Santa Monica Mountains National Recreational Area is situated approximately 1,600 feet from the project site (Figure 2-5). The proposed project is not expected to impact the National Recreational Area due to its distance from the project site, and the proposed project will not have any potential impacts on access to the National Recreational Area. No further assessment for the Santa Monica Mountains National Recreational Area is required.

2.1.4.1 Regulatory Setting

This project will affect facilities that are protected by the Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409). The Park Preservation Act prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

Table 2.4 Consistency with California Coastal Act Policies

Coastal Act Section	Discussion/Analysis of the Proposed Project
<p>Section 30210 – Access, recreational opportunities; posting.</p> <p>In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.</p>	<p>Consistent.</p> <p>This project provides for enhanced public safety and access needs through the replacement of Trancas Creek Bridge. Through the inclusion of additional safety features and ADA- compliant facilities, the proposed project will be consistent with the California Coastal Act Section 30210.</p>
<p>Section 30211 – Development not to interfere with access.</p> <p>Development will not interfere with public’s right of access to the sea to the first line of terrestrial vegetation.</p>	<p>Consistent.</p> <p>This project, with the new safety features and ADA-compliant undercrossing, will enhance coastal access and existing public recreational opportunities. Therefore, the proposed project would be consistent with the California Coastal Act Section 30211.</p>
<p>Section 30220- Coastal areas suited for water activities shall be protected.</p> <p>Coastal areas suited for water activities that cannot readily be provided at inland water areas shall be protected for such uses.</p>	<p>Consistent.</p> <p>The proposed project will not impact water activities (i.e. surfing) at the Zuma County Beach adjacent to the project site. Therefore, the proposed project would be consistent with the California Coastal Act section 30220.</p>
<p>Section 30231- The biological productivity and the quality of the biological resources should be maintained and restored whenever feasible.</p> <p>The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.</p>	<p>Consistent.</p> <p>Dewatering will be required for this project and the stream and lagoon area will be restored to the original condition or enhanced through additional restoration efforts. Work within the riverbed is also not allowed during the rainy season. Upon the completion of the project the lagoon area will be reopened to the public for recreational use. Environmental commitments and BMPs before, during, and post construction will ensure water quality and natural resources are protected.</p>
<p>Section 30232 – Hazardous substance spillage protection.</p> <p>Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.</p>	<p>Consistent.</p> <p>Accidental spillage of hazardous substances during construction is controlled through implementation of appropriate NPDES permit requirements, BMPs, and other regulatory measures to ensure against any impacts resulting from accidental spills. Prevention and clean up would comply with all applicable health and safety regulations. In addition, implementation of operational BMPs regarding the transportation and disposal of such wastes would ensure effective containment of accidental spills. Therefore, this project would be consistent with Coastal Act Section 30232.</p>

Table 2.4 Consistency with California Coastal Act Policies

Coastal Act Section	Discussion/Analysis of the Proposed Project
<p>Section 30233: Diking, filling, or dredging compliance on sensitive coastal and environmental resources.</p> <p>The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.</p>	<p>Consistent.</p> <p>This project will abide by all applicable provisions within the California Coastal Act. The project has picked the less environmentally damaging alternative available (alternative 3) and mitigation measures are provided to minimize adverse environmental effects and enhance local environmental resources. Therefore, this project is consistent with Coastal Act Section 30233.</p>
<p>Section 30235: Revetments, breakwaters, groins, harbor channels, sea wall, cliff retaining walls, and other construction that alters natural shoreline processes.</p> <p>Revetments, breakwaters, groins, harbor channels, sea wall, cliff retaining walls, and other construction that alters natural shoreline processes shall be permitted when required to serve coastal dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline and sand supply.</p>	<p>Consistent.</p> <p>This project will abide by all applicable provisions within the California Coastal Act. This project seeks to protect the functions of the existing highway structure and the adjacent public beach. Mitigation measures, BMPs, and applicable regulatory measures would be implemented to ensure local shorelines and sand supply is protected. Therefore, this project is consistent with Coastal Act Section 30235.</p>
<p>Section 30240 – Environmentally sensitive habitat areas; adjacent developments.</p> <p>Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.</p>	<p>Consistent.</p> <p>Consistent with Sections 2.13 – 2.21, Biological Environment, there will be no significant impact on environmentally sensitive habitat areas that are present at the project site. In addition all temporary construction areas will be restored to its original state post construction. Therefore, this project would be consistent with the California Coast Act Section 30240.</p>
<p>Section 30251- Scenic and visual qualities.</p> <p>The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Development shall protect views to and along the ocean and scenic coastal areas. Visually compatible with the surrounding area. Restore and enhance visual quality in visually degraded areas.</p>	<p>Consistent.</p> <p>Consistent with Section 2.5, Visual/ Aesthetics, both build alternatives will not result in adverse impacts to the visual resources, including views to the beach, the ocean and the nearby mountains. Therefore, this project would be consistent with the California Coast Act Section 30251.</p>
<p>Section 30010 – Compensation for taking of private property; legislative declaration.</p> <p>The Legislature hereby finds and declares that this division is not intended, and shall not be construed as authorizing the commission, port governing body, or local government acting pursuant to this division to exercise their power to grant or deny a permit in a manner which will take or damage private property for public use, without</p>	<p>Consistent.</p> <p>It has been identified through the environmental review process that it will be necessary, under one or more of the alternatives, to acquire private property for public use. Caltrans has, and will continue, to offer all appropriate compensation and assistance to the affected community. Therefore, the proposed project would be consistent with the California Coastal Act Section</p>

Table 2.4 Consistency with California Coastal Act Policies

Coastal Act Section	Discussion/Analysis of the Proposed Project
the payment of just compensation therefor. This section is not intended to increase or decrease the rights of any owner of property under the Constitution of the State of California or the United States.	30010.
<p>Section 30166.5 - City of Malibu.</p> <p>Subsequent to the certification of the local coastal program, the City of Malibu shall immediately assume coastal development permitting authority, pursuant to this division. Once the City of Malibu assumes coastal development permitting authority pursuant to this section, no application for a coastal development permit shall be deemed approved if the city fails to take timely action to approve or deny the application.</p>	<p>Consistent.</p> <p>Caltrans recognizes the need for continued coordination with the City of Malibu and has made the best effort to include them in the entire planning process. Caltrans will also be applying for a Coastal Development Permit with the City of Malibu and will coordinate with the City through the entirety of the permitting process. Therefore, the proposed project would be consistent with the California Coastal Act Section 30166.5.</p>

Source: California Coastal Act - <https://www.coastal.ca.gov/coastact.pdf>

ADA = Americans with Disabilities Act (of 1990)

BMPs = best management practices

City = City of Long Beach

Coastal Act = California Coastal Act

NPDES = National Pollutant Discharge Elimination System

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Figure 2-5 Parks Location Map

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Section 4(f)/CFR, Title 23, Part 774

Section 4(f) under the Department of Transportation Act of 1966 was written in an effort to preserve publicly owned parks and recreation areas, waterfowl and wildlife refuges, and historic sites considered to have national, State, or local significance. U.S. Department of Transportation (USDOT) agencies and the Federal Highway Administration (FHWA) cannot approve the use or acquisition of land from any property that is deemed significant under Section 4(f) unless there is no other feasible and prudent alternative that will achieve the project purpose and need without harming the Section 4(f) property. The USDOT agencies and the FHWA are required to consider all alternatives and avoidance, minimization, and mitigation measures before justifying the use of a significant Section 4(f) resource. Figure 2-5 shows the locations of National, State, and local parks near the project area.

Section 4(f) applies when a proposed project meets the following four conditions:

1. The project must require an approval from FHWA in order to proceed;
2. The project must be a transportation project;
3. The project must require the use of land from a property protected by Section 4(f) (23 USC Section 138(a) and 49 USC Section 303(a)); and
4. None of the regulatory applicability rules or exceptions applies (23 CFR 774.11 and 13).

Section 4(f) defines “use” in three ways: actual use, temporary occupancy, and constructive use. Actual use under Section 4(f) is the permanent incorporation of right-of-way of Section 4(f) protected lands into a transportation facility or project. The right-of-way acquisition at Zuma County Beach fits the actual use definition under Section 4(f).

2.1.4.2 Environmental Consequences

De Minimis Project Impacts for Section 4(f)

No Build Alternative – Alternative 1

There would be no alteration of the existing bridge and roadway structure. Therefore, there would be no Section 4(f) impact.

Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Both build alternatives would require that part of the northwest end of Zuma Beach’s Trancas Creek Canyon beach area be acquired for use as transportation right-of-way. The project would permanently impact a maximum of 7,275 square feet (0.17 acre) and temporarily impact a maximum of 34,690 square feet (0.80 acre) of beach

property. This reduced impact footprint was achieved through multiple modifications to both build alternatives; in addition to the area mentioned above, the initial proposal would have impacted an estimated 70 parking spots due to proximity and utility relocation impacts.

Temporary use of the “Authorized Vehicles Only” access at the west end of the parking lot is expected during construction to provide equipment access to the southbound side of the bridge. No permanent access impact to the Zuma County Beach is expected. All temporarily disturbed areas will be restored to their original state after construction.

Figure 2-6 shows the approximate areas that would need to be acquired from Zuma County Beach for the build alternatives.

2.1.4.3 Avoidance, Minimization, and Mitigation Measures

- LU-1** In order to avoid loss of Zuma Beach parking spaces, the California Department of Transportation (Caltrans) will relocate utility poles to the edge of Caltrans right-of-way instead of onto beach property as originally proposed.
- LU-2** The Temporary Construction Easement (TCE) area will be returned to its original state after construction has been completed. Detailed design and construction of the Trancas Creek Bridge will be further discussed between the Project Development Team (PDT) and the Los Angeles County Department of Beaches and Harbors during the design phase.
- LU-3** Traffic control will be implemented during construction to ensure unimpeded access to Zuma County Beach.
- LU-4** The “Authorized Vehicles Only” entrance to the Zuma Beach parking lot will be utilized by construction vehicles to access the southbound side of the bridge. To prevent unauthorized access by the public, the entrance will be guarded at all times during construction and no public access will be allowed. When construction is not active, the gate will be locked and secured as directed by the Los Angeles County Beaches and Harbors Department.



Alt 2 - Short Bridge Construction Easement
 California Department of Transportation
 District 7, Los Angeles



Alt 3 - Long Bridge Construction Easement
 California Department of Transportation
 District 7, Los Angeles

Map Created by Robert Wang, Division of Environmental Planning, 3-6-17

Figure 2-6 Approximate Right-of-Way Acquisition Required

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2.2 Community Impacts

2.2.1 Community Character and Cohesion

2.2.1.1 Regulatory Setting

The National Environmental Policy Act of 1969 (NEPA), as amended, established that the federal government use all practicable means to ensure that all Americans have safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 United States Code [USC] 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

2.2.1.2 Affected Environment

The project site is located in the Santa Monica Mountains Region and in the incorporated City of Malibu. The City is further divided into different neighborhoods that exhibit their own unique qualities. The project site sits on the edge of the Trancas Canyon Neighborhood, which is bounded by National Park Service land to the north and the Trancas Lagoon to the south, and the Zuma/Westward Beach Neighborhood, which is bounded by the Trancas Lagoon to the north and the Westward Beach to the south.

The character of the Trancas Canyon Neighborhood is dominated by single-family residences and open land, with a small amount of multi-family residential and one commercial area composed of businesses that mainly serve the local community. PCH runs through the Trancas Canyon Neighborhood as the main thoroughfare, connecting it to the rest of the City.

The Zuma/Westward Beach Neighborhood to the southeast of the project is primarily composed of an extensive stretch of pristine beachfront that supports a variety of

recreational activities for both locals and visitors. Most of the shoreline remains undeveloped, but clusters of homes can be found along the way.

2.2.1.3 Environmental Consequences

No Build Alternative – Alternative 1

If the proposed project is not built, there will be no alteration to the existing bridge structure. Without the replacement, the bridge will continue to deteriorate and may become unsafe to use, and the connectivity of the communities on PCH around the Trancas Creek Bridge will be severed. The closest detour for the bridge requires more than 3 additional travel miles.

Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

The purpose of the proposed project is to ensure the safety and reliability of the existing roadway on PCH. The replacement of the bridge will ensure the continued access and economic vibrancy of the communities connected by PCH. None of the proposed project components would create disruptions to the surrounding neighborhoods, change existing community relationships, or interfere with the operation of the existing public facilities.

2.2.1.4 Avoidance, Minimization, and/or Mitigation Measures

The proposed build alternatives will not result in any adverse effects in terms of community character and cohesiveness; therefore, no avoidance, minimization, and/or mitigation measure will be required.

2.2.2 Relocations and Real Property Acquisition

2.2.2.1 Regulatory Setting

The Caltrans Relocation Assistance Program is based on the federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 CFR Part 24. The purpose of the Relocation Assistance Program is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Even though relocations are not anticipated for this project, Appendix D provides a summary of the Relocation Assistance Program.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 United

States Code [USC] 2000d, et seq.). Please see Appendix C for a copy of the Caltrans Title VI Policy Statement.

2.2.2.2 Affected Environment

The project study area traverses through the City via PCH and is located southeast of Trancas Canyon Road and northwest of Guernsey Avenue. To the northwest of the project are private properties and a community beach club. A commercial property with small businesses, banks, and a grocery store serving the local community is located directly northeast of the project. The Zuma County Beach, which extends from the bridge to the south end of the project area, is southwest of the project. There are private homes and a vacant lot with private owners to the southeast of the project.

2.2.2.3 Environmental Consequences

Alternative 1 – No Build Alternative

If the project is not built, there would be no potential to affect any properties or parcels. Therefore, no relocation or real property acquisition impact would occur.

None of the proposed build alternatives require displacement or relocation; therefore, this section will only discuss environmental consequences for the project acquisition impacts.

Alternative 2 – Short Bridge Replacement

The short bridge replacement build alternative will require the acquisition and permanent displacement of a residential home to the west of the bridge. The primary reason for the permanent acquisition is due to access. As the residential home is located only around 50 feet from the existing bridge and the project site, access to the residential home will be blocked permanently by the retaining wall required to raise the bridge by 2.5 feet above the current bridge profile. This alternative would also require the acquisition of roughly 30,000 square feet from the adjacent vacant property southwest of the bridge at parcel No. 4469-045-001 (Figure 2 7) and the Zuma Beach property (this will be further discussed in Section 2.1 and Appendix B).

Alternative 3 – Long Bridge Replacement (Preferred Alternative)

The long bridge replacement build alternative will require the potential temporary displacement of a residential home to the northwest of the bridge from the period of three months up to 2 years. However, acquisition of the private residential home will not be required. The primary reason for the temporary displacement is due to intermittent loss of access. As the residential home is located only around 50 feet from the existing bridge and the project site, access to the residential home will be

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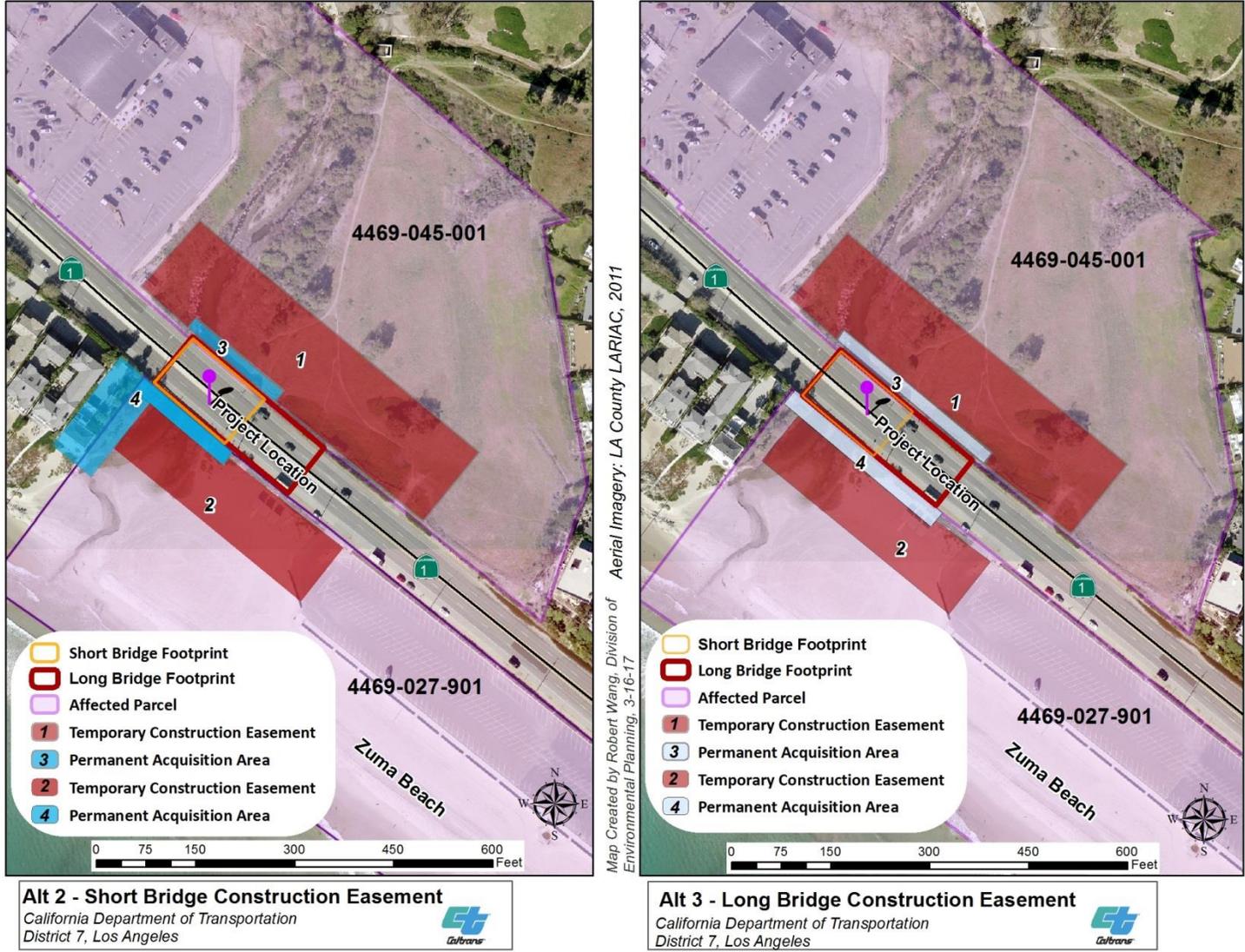


Figure 2-7 Alternative 2 – Short Bridge Construction Easement and Alternative 3 – Long Bridge Construction Easement

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blocked during construction of the new bridge. Alternative access options will be investigated during final design. This alternative would also require the acquisition of roughly 30,000 square feet from the adjacent vacant property northeast of the bridge at parcel No. 4469-045-001 (Figure 2 7) and the Zuma Beach property (this will be further discussed in Section 2.1 and Appendix B).

2.2.2.4 Avoidance, Minimization, and/or Mitigation Measures

Both build alternatives will require the displacement of a residential home either on a temporary or permanent basis. Alternative 2 will require the permanent acquisition of the residential home to the west of the bridge while Alternative 3 displace the residents from a period of 3 months to 2 years. Therefore, no relocation impacts or avoidance, minimization, and/or mitigation measures regarding relocation will be required. However, the project will require the partial acquisition of the real property mentioned above and shown on Figure 2-7.

- COM-1** To ensure that property owners are properly and fairly compensated for any acquisition required for this project, adequate funds will be set aside and utilized for that purpose.
- COM-2** Caltrans will provide relocation assistance according to the Relocation Assistance Program outlined by Appendix D of this document.
- COM-3** Caltrans will coordinate with the homeowner throughout the planning, construction, and post-construction phase to ensure the needs of the relocated persons are met and the relocation process takes place smoothly.

2.2.3 Environmental Justice

2.2.3.1 Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2017, this was \$24,600 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans' commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix C of this document.

2.2.3.2 Affected Environment

To identify potential impacts to minority and/or low-income populations, 2015 U.S. Census data was obtained for Census Tract 8004.08 (where the project is located), the City of Malibu, and Los Angeles County. The racial, income and poverty data are summarized in Table 2.5. The data indicate that the number of minority and/or low income people in the vicinity of the project represent a small percentage of the population as a whole.

Table 2.5 Race, Ethnicity, and Poverty Status within the Project Study Area

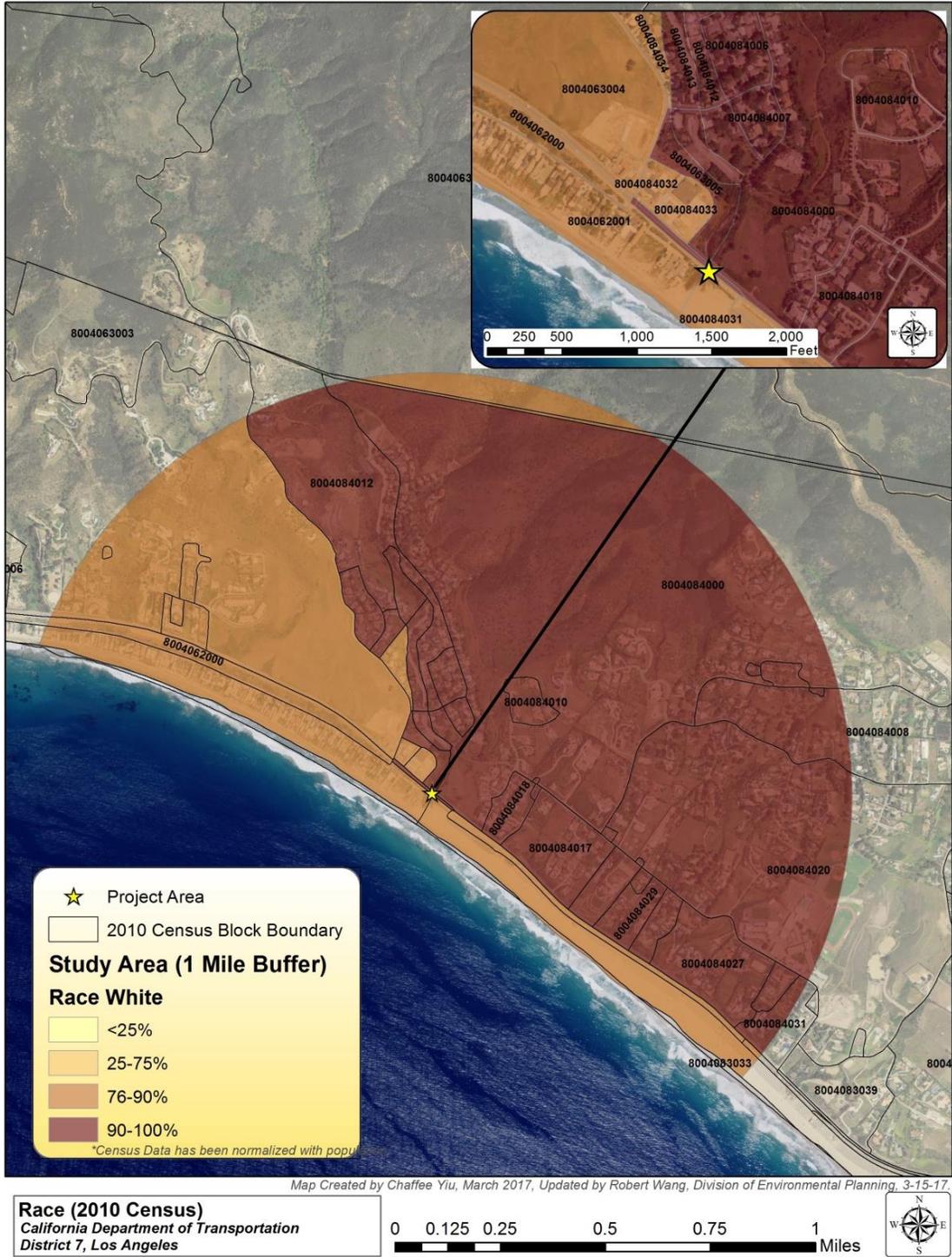
Subject	Census Tract 8004.08		City of Malibu		Los Angeles County	
	Estimate	Percent	Estimate	Percent	Estimate	Percent
Race						
White	6,068	83.10%	10,870	84.60%	2,703,547	26.90%
Black or African American	127	1.70%	207	1.60%	801,739	8.00%
American Indian and Alaska Native	0	0.00%	0	0.00%	18,726	0.20%
Asian	288	3.90%	459	3.60%	1,401,289	14.00%
Native Hawaiian and Other Pacific Islander	0	0.00%	8	0.10%	24,657	0.20%
Some other race	0	0.00%	0	0.00%	27,178	0.30%
Two or more races	135	1.80%	263	2.00%	218,933	2.20%
Hispanic or Latino	688	9.40%	1,049	8.20%	4,842,319	48.20%
Total Population	7,306	100%	12,856	100%	10,038,388	100%
Total Minority	1238	16.9%	1986	15.4%	7,334,841	73.1%
Income and Poverty Status						
Median Household Income	\$112,138	n/a	\$119,659	n/a	\$56,196	n/a
Households Below Poverty Level	2,959	6.3%	5,498	6.5%	3,263,069	14.3%

Source: <https://factfinder.census.gov>, accessed on 4/12/2017.

n/a = not applicable

In addition, 2010 Census data were used identify the proportions of the populations who identify as white or English speaking within a 1-mile radius of the project. Income data within this same 1-mile radius was also collected. As graphically portrayed on Figures 2-8, 2-9, and 2-10, the data show that the vast majority of the people in the immediate vicinity of the project site are white, English speaking, and have household incomes in the \$50,000 to \$100,000+ range.

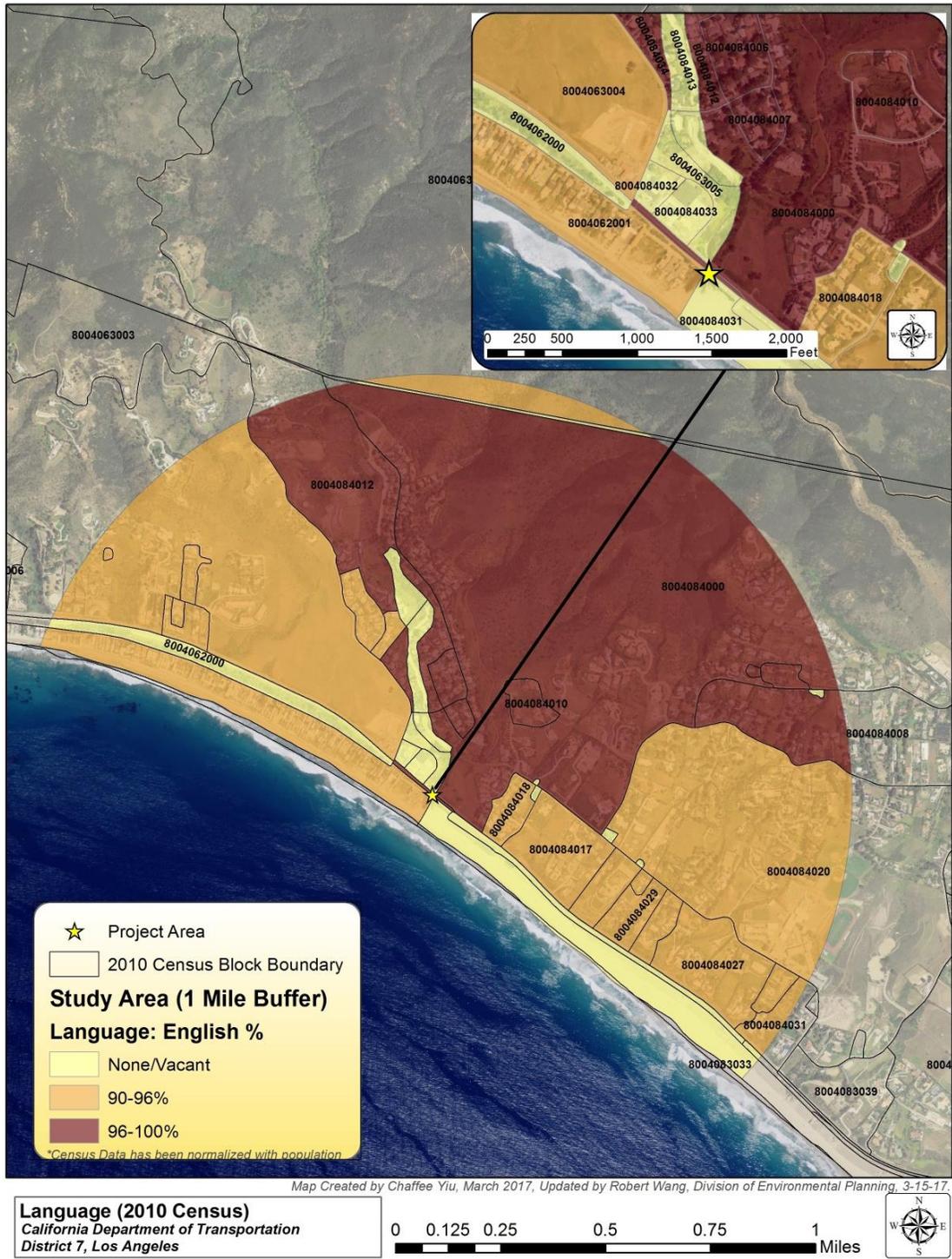
No minority or low-income populations that would be adversely affected by the proposed project have been identified as determined above. Therefore, this project is not subject to the provisions of EO 12898.



* Census blocks are normalized for analytical purposes.

Figure 2-8 1-Mile Census Data: Race

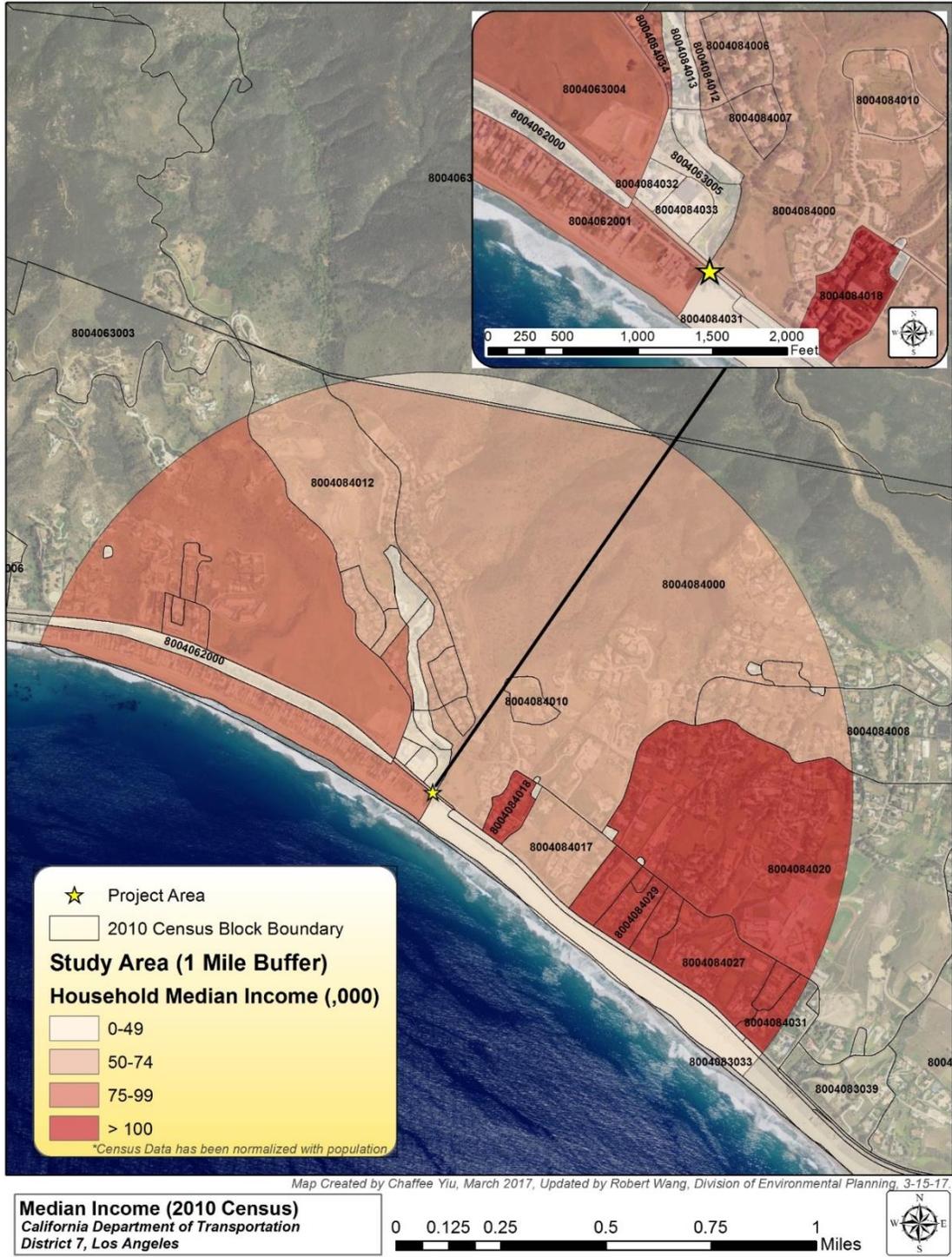
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*Census blocks are normalized for analytical purposes.

Figure 2-9 1-Mile Census Data: Percentage of English Speakers

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*Census blocks are normalized for analytical purposes.
*Within this map, the 0-49,000 areas are largely vacant land.

Figure 2-10 1-Mile Census Data: Median Household Income

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2.2.3.3 Environmental Consequences

No Build Alternative – Alternative 1

Under the no build alternative, the existing environment will stay the same with no intrusions or changes to the existing neighborhood. Therefore, no potential environmental justice impact is expected.

Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

The purpose of the proposed project is to ensure the safety and reliability of the existing roadway on PCH. The replacement of the bridge will ensure the continued access and economic vibrancy of the communities connected by PCH. None of the proposed project components would create disruptions to the surrounding neighborhoods, change existing community relationships, or interfere with the operation of the existing public facilities.

2.2.3.4 Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, the alternatives of this project will not cause disproportionately high and adverse effects on any minority or low-income populations per EO 12898 regarding environmental justice.

None of the build alternatives for the proposed project would result in impacts in regard to environmental justice. Therefore, no avoidance, minimization, and/or mitigation measures will be required.

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2.3 Utilities/Emergency Services

2.3.1 Regulatory Setting

California Code of Regulations, Streets and Highways Code Sections 700-711, discuss utility relocation policies and procedures. PRC 21083, 21087 and the CEQA Guidelines Section 15126.2(a) require lead agencies to assess the impact of a proposed project by examining alterations in the human use of the land, including public services. Public Utilities Commission General Order 131-D provides guidance for transportation projects that involve the relocation of 50-kilovolt or higher transmission lines.

2.3.2 Affected Environment

Local utility and emergency services include public and private utilities, schools, fire stations, police stations, and medical institutions. The following section will discuss the local facilities that are available around the project site and the facilities that may be impacted.

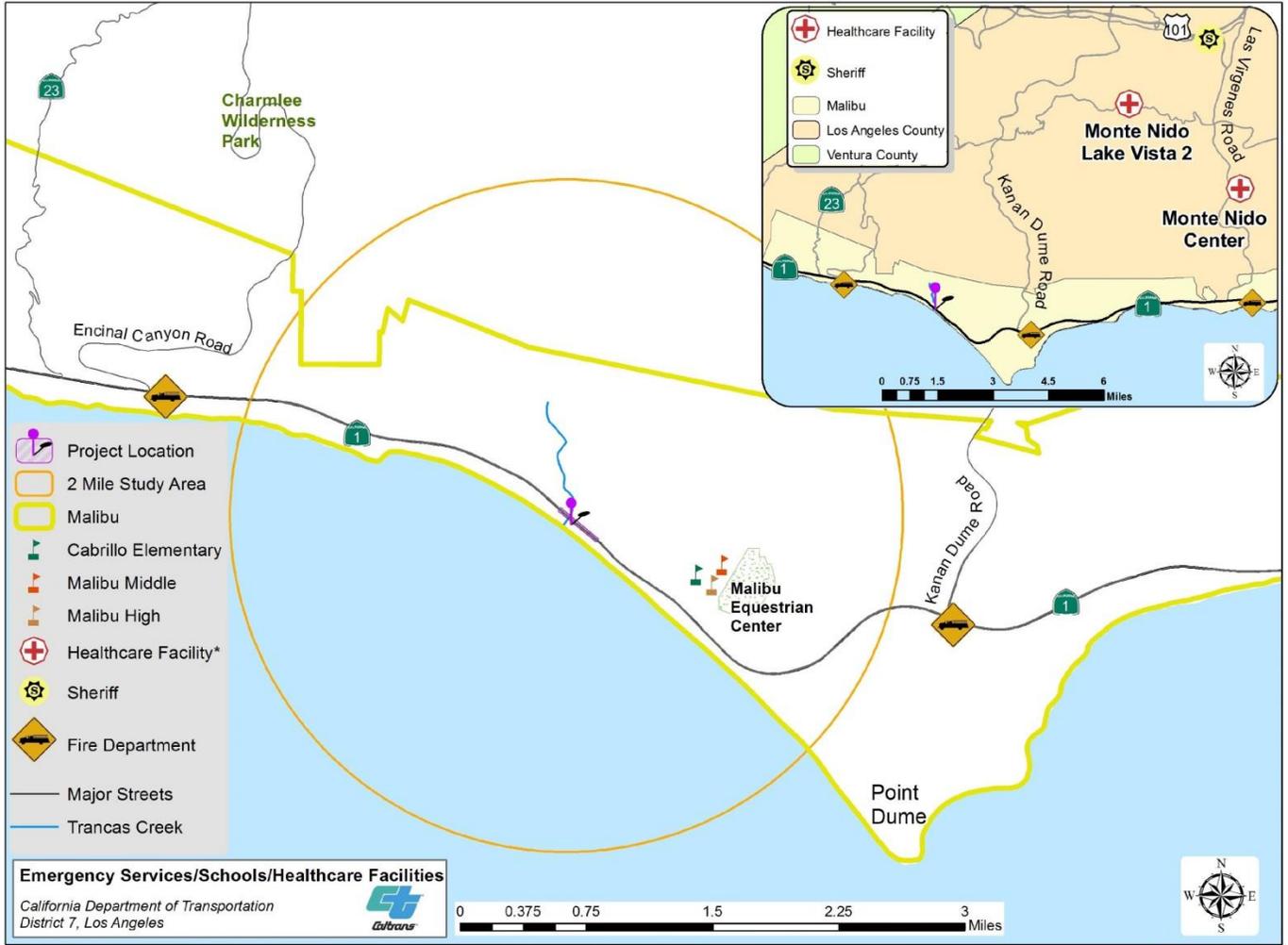
2.3.2.1 Public and Private Utilities

The major utility suppliers in the City of Malibu are Southern California Edison (SCE; electricity), the Southern California Gas Company (gas), the County of Los Angeles Waterworks District 29 (water), and Charter Communications and Frontier (cable, phone, and internet). Utility infrastructure in the project study area includes power poles, telephone poles, natural gas pipelines, water pipelines, roadway lighting, and fire hydrants.

2.3.2.2 Schools

The City of Malibu is served by the Santa Monica-Malibu Unified School District. The school district consists of 10 elementary schools, two middle schools, three high schools, an adult school, and an alternative school. Of these public schools, three elementary schools, one middle school, and one high school are located in the City. The City is also served by a variety of private schools, including Our Lady of Malibu, Colin McEwen High School, Malibu Methodist Children's Nursery School, and Pepperdine University. The nearest school, Juan Cabrillo Elementary School, is located approximately 1 mile from the project area. Schools in the general vicinity are shown on Figure 2-11.

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*California Licensed Healthcare Facilities, January 2006. California Health and Human Services Agency, Office of Statewide Health Planning and Development, Sacramento, CA

Map Created by Robert Wang, Division of Environmental Planning, January 26, 2017

Figure 2-11 Emergency Services, School, and Healthcare Facility Locations

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2.3.2.3 Fire Protection Services

The County of Los Angeles Fire Department serves the City and the unincorporated area surrounding Malibu. Four local fire stations (Nos. 70, 71, 88, and 99) serve Malibu and the surrounding area (Figure 2-11). Combined, these stations have four staff engine companies, two paramedic rescue squads, one battalion chief, and a swift water rescue team that is staff during inclement weather.

The project area is adjacent to the Trancas Canyon and Zuma/Westward Beach neighborhoods. Similar to many areas in the City, the Trancas Canyon Neighborhood is located in an extreme fire hazard zone. This condition is due to the lack of roads for both evacuation and fire protection access in case of emergencies. This problem is further exacerbated by the lack of water hookups for emergency services and the limited water pressure available at those hookup sites.

2.3.2.4 Police Protection Services

The City contracts with the Los Angeles County Sheriff's Department to provide enforcement services in the City. This contract was established in March 1991, when the City was incorporated. The City's enforcement service is provided by the Malibu/Lost Hills Sheriff's Station located in the City of Agoura (Figure 2-11).

The crime rate in the City has decreased by 65 percent since incorporation, compared to an 11 percent decrease in Los Angeles County over the same period. The fatality rate has also fallen 61 percent since incorporation, compared to a 48 percent reduction during the same period in Los Angeles County.

2.3.2.5 Medical Institutions

The nearest medical office to the project site, the Malibu Specialty Center, is located approximately 3 miles from the project site. The nearest urgent care and family medicine offices are located several miles away in Malibu Colony (Figure 2-11).

2.3.3 Environmental Consequences

2.3.3.1 No Build Alternative – Alternative 1

If the project is not built, there would be no effect on utilities or emergency services.

2.3.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Alternative 2 would require the relocation of 1 natural gas pipeline, 4 power poles, 10 telecom ducts, 3 water pipes, and 3 fiber optic lines, and would remove 1 abandoned water pipe. Construction of the proposed project will likely have short-

term effects on local accessibility and use by emergency service vehicles. The bridge replacement would be completed by constructing one-half of the bridge at a time, which allows for continuous traffic flow throughout the duration of construction even though the roadway capacity would be cut in half with one travel lane in each direction. This might result in a temporary disruption of service during construction.

Alternative 3 would require the same utility relocations as Alternative 2 plus the relocation of 1 manhole and the installation of 4 guy anchors for the power poles. Construction of the proposed project will likely have short-term effects on local accessibility and use by emergency service vehicles. The bridge replacement would be completed by constructing one-half of the bridge at a time, which allows for continuous traffic flow throughout the duration of construction even though the roadway capacity would be cut in half with one travel lane in each direction. This might result in a temporary disruption of service during construction.

2.3.4 Avoidance, Minimization, and/or Mitigation Measures

- UT-1** All affected utility infrastructure will be relocated with consideration to minimize any disruption of service and to minimize any effects as much as possible.
- UT-2** A Transportation Management Plan will be implemented to provide detailed access and detour strategies that will minimize response times for emergency and public services.
- UT-3** The California Department of Transportation (Caltrans) will work with the City of Malibu to ensure public access and the availability of emergency and public services during the construction period.

2.4 Traffic and Transportation/Pedestrian and Bicycle Facilities

2.4.1 Regulatory Setting

Caltrans, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR Part 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to federal-aid projects, including Transportation Enhancement Activities.

2.4.2 Affected Environment

PCH is a designated north-south multilane conventional highway with two lanes in each travel direction. Both the northbound and southbound directions of travel are paved with asphalt concrete pavement and are separated by a raised island. The proposed project is located on an existing State multilane conventional highway facility at the Trancas Creek Bridge. PCH is the major north-south traffic artery in the City of Malibu and the only convenient route along the coast. If the Trancas Creek Bridge were to go out of service, the nearest alternative route for traffic heading north would require a detour of several miles (involving Kanan Dume Road, Mulholland Highway, and Decker Canyon Road before returning to PCH).

2.4.2.1 Existing Traffic Volumes and Level of Service (LOS) Analysis

The existing traffic volumes (Table 2.6) in the area were used as the baseline for the traffic and accident analysis. The data were collected in 2015 and show the annual average daily traffic (AADT) to be between 28,000 and 29,500 vehicles in the project

Table 2.6 Existing Traffic Volumes

Route	PM	Description	Back Peak Hour	Back Peak Month	Back AADT	Ahead Peak Hour	Ahead Peak Month	Ahead AADT
01	54.02	Malibu, Kanan Dume Road	3600	33500	28000	3800	35500	29500
01	56.84	Malibu, Trancas Canyon Road/ Broad Beach Road	2500	23600	21300	1950	18400	16700
01	57.39	Malibu, Lunita Road	1950	18400	16700	1950	18400	16700

AADT = Annual Average Daily Traffic
PM = Post Mile

study area on PCH. The percentage of truck traffic on nearby segments of PCH varies from 3.04 percent at the Route 27/Topanga Canyon Boulevard junction to 5.43 percent at the Route 23/ Decker Canyon Road junction.

2.4.2.2 Existing Accident Conditions in the Project Study Area

The accident rate data taken from the Transportation Engineering Performance Assessment (March 2017) shows the total accident rates on this segment of PCH during 2015 were lower than the average accident rates on similar state routes (Table 2.7). In this segment, there were 15 recorded collisions and no fatal accidents. The types of collision are as follows: 1 head on (6.3 percent), 4 sideswipe (25 percent), 5 rear end (31.3 percent), 4 broadside (25 percent), and 2 others (12.5 percent).

Table 2.7 Existing Accident Conditions

Post Mile	Number of Accidents			Actual (acc/mvm)			Average (acc/mvm)		
	Total	Fatal	Injury	Fatal	F+I	Total	Fatal	F+I	Total
56.6/ 56.9	15	0	3	0	0.32	1.40	0.01	0.60	1.45

acc/mvm = Accident per Million Vehicle Miles traveled
F+I = Fatal + Injury
Average (acc/mvm) = average for similar state routes

The major factors causing the collisions are as follows: one alcohol influence (6.3 percent), four failure to yield (25 percent), three improper turn (18.8 percent), four speeding (25 percent), two other violations (12.5 percent), one unknown (6.3 percent), and one not stated (6.3 percent).

2.4.2.3 Existing Pedestrian and Bike Facilities

This segment of PCH, including the Trancas Creek Bridge, has a marked Class 2 bike lane in the southbound direction that was installed by the City of Malibu in 2015. It is

located between the travel lanes and the shoulder parking area and is not protected by any buffer or barrier.

The existing bridge does not have raised sidewalks for pedestrian use; instead, pedestrians use the shoulder and bike lane when walking along the bridge. There is a marked crosswalk at the signalized intersection at Trancas Canyon Road, approximately 740 feet to the north of the bridge, where pedestrians may safely walk across the highway. However, pedestrians are frequently seen running across PCH on or near the bridge on their way to or from Zuma Beach. The Pacific Coast Highway Safety Study, prepared jointly by the California Department of Transportation (Caltrans) and the City of Malibu and completed in 2015, recognized the problem that pedestrians have trying to move between the Trancas Country Market and Zuma Beach. It recommended that a sidewalk be installed along the southbound side of PCH from the signal at Trancas Canyon Road to Zuma Beach and that a pedestrian underpass be constructed to allow for crossing PCH at the Trancas Creek Bridge.

2.4.3 Environmental Consequences

2.4.3.1 No Build Alternative – Alternative 1

If the project is not built, there would be no effect on existing traffic conditions. There would be no impact due to construction vehicles nor any improvement in pedestrian or bicycle mobility in the area. Over time the bridge would continue to deteriorate, possibly to the point where it would become unsafe to use. This deterioration could lead to adverse impacts to traffic in the future.

2.4.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Alternative 2 would not reduce or add capacity to the existing roadway. It would, however, provide a new bridge that should provide a safe and reliable creek crossing over the course of its 75-year design life. The proposed bridge would also be widened to provide more space for the bicycle lane and pedestrian travel. This would help promote multimodal transportation on PCH.

The effects associated with Alternative 3 are similar to those for Alternative 2. The only difference is that Alternative 3 would allow for the construction of a pedestrian undercrossing adjacent to the southern bank of Trancas Creek. This would allow for easier and safer movement of pedestrians between the Trancas Country Market and Zuma Beach.

Construction Impacts

Construction of the proposed project would likely have short-term effects on local accessibility. The bridge replacement would be completed by constructing one-half of the bridge at a time, which would allow continuous traffic flow throughout the duration of construction even though the roadway capacity would be cut in half with one travel lane in each direction.

2.4.4 Avoidance, Minimization, and/or Mitigation Measures

- TT-1** All affected transportation infrastructure will be replaced with equivalent transportation infrastructure of the same capacity as that currently present.
- TT-2** The California Department of Transportation (Caltrans) and its construction contractors will seek to minimize disruption of service as much as possible through the use of a Transportation Management Plan that will provide detailed access and detour strategies to minimize delays for the public and emergency vehicles. Recommendations in the Transportation Management Plan will include the following:
- Maintaining two open lanes to the traveling public during peak hours
 - Providing bicycle and pedestrian access at all times during construction
 - Adhering to Pacific Coast Highway (PCH) lane closure protocols
- TT-3** Caltrans will work with the City of Malibu to ensure public access and the availability of emergency and public services during the construction period.

2.5 Visual/Aesthetics

2.5.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration (FHWA) in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

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” (CA Public Resources Code [PRC] Section 21001[b]).

2.5.2 Affected Environment

A Visual Impact Assessment was prepared on December 8, 2015, to assess the proposed project’s potential to affect local visual resources. The results of this analysis have been incorporated in this section. The proposed project is located on PCH at Trancas Creek Bridge (Figures 2-12 and 2-13). The key views are ocean and beach views to the south and mountain views to the north. Trancas Creek flows under the bridge into a lagoon created by a seasonal berm at Zuma Beach. The existing landscape consists of sparse vegetation and ice plant on the slopes in a suburban coastal setting dominated by low-level commercial and residential buildings.

Over the past 75 years, the viewshed has gone from open to constrained due to building development surrounding the bridge (Figures 2-14 and 2-15). The original bridge was built in 1927 with the mission arch bridge railing, but the railing has since been replaced with the barrier-type railing.

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Figure 2-12 Looking Northbound on Pacific Coast Highway



Figure 2-13 Looking Southbound on Pacific Coast Highway.



Figure 2-14 View from the Beach in 1955

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Figure 2-15 View from the Beach in 2011

The Malibu LUP Chapter 6, Section 6.3 has State Route 1 designated as a "Scenic Road." Route 1 (PCH) is a State Highway and listed on the State List of Highways eligible for official State Scenic Highway. At present however, neither the city of Malibu nor the County of Los Angeles has sought official State Scenic Highway designation for State Route 1 (PCH). None of the components of the proposed project site are in an area containing unique scenic resources, nor are they located within an existing scenic vista. No notable viewsheds are located in the proposed project study area that contain any distinct physical terrain features or points of interest.

2.5.3 Environmental Consequences

2.5.3.1 No Build Alternative – Alternative 1

There would be no change to the existing visual and aesthetic qualities of the area. The barrier-type railing that is on the existing bridge would continue to obstruct views for vehicle travelers, pedestrians, and bicyclists.

2.5.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

The proposed bridge replacement alternatives will not result in adverse impacts to the nearby available visual resources, including views to the beach, the ocean and the nearby mountains.

Additionally, the proposed bridge will blend better into the natural environment and will improve the visual quality for the beachgoers, local residents, and businesses. These viewer groups have high sensitivity to the bridge viewshed because it is part of their visual landscape. The project would use open railings approved by the City of Malibu as a delegate of the California Coastal Commission that would give travelers over the bridge better views of the coast and mountains. Vehicle travelers have low sensitivity to the bridge because they travel at high speeds and have a brief view of the bridge. Pedestrians and bicyclists traveling over the proposed bridge will have more time to enjoy the views since the bridge will be widened and will include a bicycle lane. This viewer group has moderate sensitivity to the bridge because they travel at a slower speed. Overall, the new bridge is expected to be more aesthetically pleasing and generate a positive viewer response.

2.5.4 Avoidance, Minimization, and/or Mitigation Measures

The proposed bridge does not have any expected visual impacts and the following measures will be taken to further ensure that no visual impacts will occur.

- VIS-1** The designs on the barrier used on the Zuma Beach parking lot can be incorporated into the new Trancas Creek Bridge to provide thematic consistency in the area.
- VIS-2** A bridge railing design approved by the City of Malibu through the Local Coastal Development Permit process, under the delegation of the California Coastal Commission, will be used to improve the visibility of the beach and hills from the roadway.
- VIS-3** The use of earth-tone colors that match the natural soil/rock color in the vicinity should be considered for the concrete portions of the structure. This will help visually blend the structure to the natural surroundings.
- VIS-4** Nonnative plant species within and around the project site should be removed where possible. The planting of native plants around disturbed work areas will help restore the work site to a more natural state, creating a more consistent aesthetic for the area.
- VIS-5** Materials and design of site features such as coastal access points should be appropriate for the visual character of the location.

2.6 Cultural Resources

2.6.1 Regulatory Setting

The term “cultural resources” as used in this document refers to all “built environment” resources (structures, bridges, railroads, water conveyance systems, etc.), culturally important resources, and archaeological resources (both prehistoric and historic), regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966 , as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation [36 Code of Federal Regulations (CFR) 800]. On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) between the Advisory Council, the Federal Highway Administration (FHWA), State Historic Preservation Officer (SHPO), and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans. The FHWA’s responsibilities under the PA have been assigned to Caltrans as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as CA Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet the National Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way.

2.6.2 Affected Environment

The City of Malibu is located on the Pacific coast, to the south of the City of Thousand Oaks, and has a rich cultural history. The project location is associated with the Ventureño Chumash of the Hokan language stock. The coastal Chumash population adapted to harvest shellfish, fish, and a variety of seeds and vegetable products. They also hunted marine mammals and deer, which they traded for inland

resources (e.g., pinon nuts, acorns, and elk). The aboriginal Chumash society went through devastating and irreversible changes during the colonization by the Spanish in the 18th and 19th centuries, but is now experiencing a revitalization due to a heightened consciousness of traditional values and concepts.

The prehistoric period extends as far back as 9,000 years from the present, and can be divided into three periods: Early Period or Millingstone Horizon (ca. 9,000–3,500 BP), Middle or Intermediate Period (ca. 3,500–1,000 BP), and Late Period (ca. 1,000–1,769 AD). The prehistoric period is characterized by an increase in population and an increase in the sophistication of farming and food gathering. A market economy based on trade was developed during the Late Period.

The history of Malibu and its surrounding area can be divided into four periods: Early Explorer, Spanish Mission, Mexican Ranch, and Anglo-American. This history is associated with the increase in Western settler encroachment of Native American land and one of the last Spanish Land Grants owned by the Rindge Family. The modern development of the Malibu area did not occur until after the 1930s, when Rhonda May Rindge lost a lawsuit against the State of California and started leasing and selling her properties from the Spanish Land Grant.

2.6.2.1 Area of Potential Effect

An Area of Potential Effects (APE) was established to ensure that any significant historic, architectural, and archaeological resources in the project area were identified and potential impacts assessed. The APE encompasses all areas of potential ground disturbance associated with the proposed project, extending along PCH from north of Trancas Canyon Road to south of Guernsey Avenue and flaring out to include the TCEs just upstream and downstream of the bridge.

Studies and Methodologies

Two pedestrian Phase I surveys were conducted where two separate teams of qualified Caltrans archaeologists walked the grounds of the entire APE for the proposed bridge replacement (approximately 6 acres).

Historical research for the built environment was also conducted. The research included consulting with the California Historical Resources Information System for properties eligible for or listed in the National Register of Historic Places and/or California Register of Historical Resources, and the Los Angeles County Assessor's office website for construction dates.

It was determined that there are no historic, architectural, or archaeological resources requiring evaluation located within the APE.

2.6.2.2 Consultation and Coordination

Native American Consultation and AB 52

Native American consultation was initiated on July 26, 2012 and again on October 6, 2015, with the Native American Heritage Commission (NAHC) in compliance with Section 106 of the National Historic Preservation Act (NHPA) and PRC Sections 21080.1, 21080.3.1, and 21080.3.2, and Assembly Bill 52 of 2014. Consultation with local tribes included on the NAHC lists include Beverly Folkes and Randy Guzman-Folkes on August 1, 2012, and September 12, 2012; Coastal Band of Chumash on August 1, 2012, and October 29, 2012; Barbareno/Ventureno on August 1, 2012, October 13th, 2015, and April 22, 2016; Santa Ynez Band of Mission Indians on August 1, 2012, August 13, 2012, March 28th, 2016 (see Table 2.8). Local tribes recommended monitoring during construction, but did not identify any specific resources in the immediate area.

Table 2.8 Native American Consultation Chart

Date	Organization	Type of Communication
07/26/2012	Native American Heritage Commission	Letter
08/01/2012	Barbareno/Ventureno Band of Mission Indians	Letter
08/01/2012	Santa Ynez Band of Mission Indians	Letter
08/01/2012	Beverly Folkes and Randy Guzman-Folkes	Letter
08/01/2012	Coastal Band of Chumash	Letter
08/13/2012	Santa Ynez Band of Mission Indians	Phone Call
09/12/2012	Beverly Folkes and Randy Guzman-Folkes	Phone Call
10/29/2012	Coastal Band of Chumash	Phone Call
10/06/2015	Native American Heritage Commission	Letter
10/13/2015	Barbareno/Ventureno Band of Mission Indians	Letter
03/28/2016	Santa Ynez Band of Mission Indians	Email/ Phone Call
04/22/2016	Barbareno/ Ventureno Band of Mission Indians	Email/ Phone Call

2.6.3 Environmental Consequences

2.6.3.1 No Build Alternative – Alternative 1

If the proposed project will not be built, then there would be no alteration to the existing bridge structure or the surrounding area. Hence, no effects to cultural resources will occur.

2.6.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

There are no archaeological or historic resources located within the APE. Therefore, neither build alternative would have an effect on sensitive cultural resources.

2.6.4 Avoidance, Minimization, and/or Mitigation Measures

The proposed Build Alternatives will not result in any adverse effects to cultural resources; therefore, no avoidance, minimization, and/or mitigation measures are required. An additional survey will be required if the project scope changes to include areas not previously surveyed.

CUL-1 It is California Department of Transportation (Caltrans) policy to avoid impacts to cultural resources whenever possible. If buried cultural materials are encountered during construction, Caltrans' policy is to stop work immediately in that area until a qualified archaeologist can evaluate the nature and significance of the find. Work can only resume after the approval to proceed has been given by a qualified Caltrans archaeologist or the District Heritage Resource Coordinator.

CUL-2 If human remains are discovered, State Health and Safety Code Section 7050.5 requires that all work stops immediately, no further disturbance is to occur in the immediate vicinity of the remains, and the County Coroner be contacted immediately. District 7 will also be contacted immediately upon the unexpected finding of human remains. If the remains are thought to be Native American, Health and Safety Code Section 7050.5 dictates that within 24 hours of the discovery, the Coroner will notify the Native American Heritage Commission who will then notify the Most Likely Descendant pursuant to Public Resources Code (PRC) Section 5097.98. Further provisions of PRC 5097.98 will also be followed as applicable.

PHYSICAL ENVIRONMENT

2.7 Hydrology and Floodplain

2.7.1 Regulatory Setting

Executive Order (EO) 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The FHWA requirements for compliance are outlined in 23 Code of Federal Regulations (CFR) 650 Subpart A.

To comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

2.7.2 Affected Environment

This section of the Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI) evaluates the potential hydrology and floodplain impacts associated with implementation of the proposed project alternatives. Evaluation is required when projects are anticipated to encroach on a 100-year base floodplain. The analysis presented in this section is based on the Final Hydraulic Report for the Trancas Creek Bridge Replacement Project.¹

Historically, the City of Malibu has been susceptible to major storms, as are most California coastal communities. Like most of Southern California, Malibu is subject to unpredictable seasonal rainfall. Winter rains are scant most years; however, every few years the region is subjected to periods of intense and sustained precipitation that results in flooding. Localized flooding occurs along the coast, in lagoons, and in

¹ California Department of Transportation. 2017. Final Hydraulic Report for the Trancas Creek Bridge Replacement Project.

creeks during peak storm events. Floods are natural and recurring events that become hazardous when humans encroach onto floodplains, modifying the landscape, increasing the amount of impervious surfaces, and building structures in areas meant to convey excess water during floods.

2.7.2.1 Designated Flood Zones

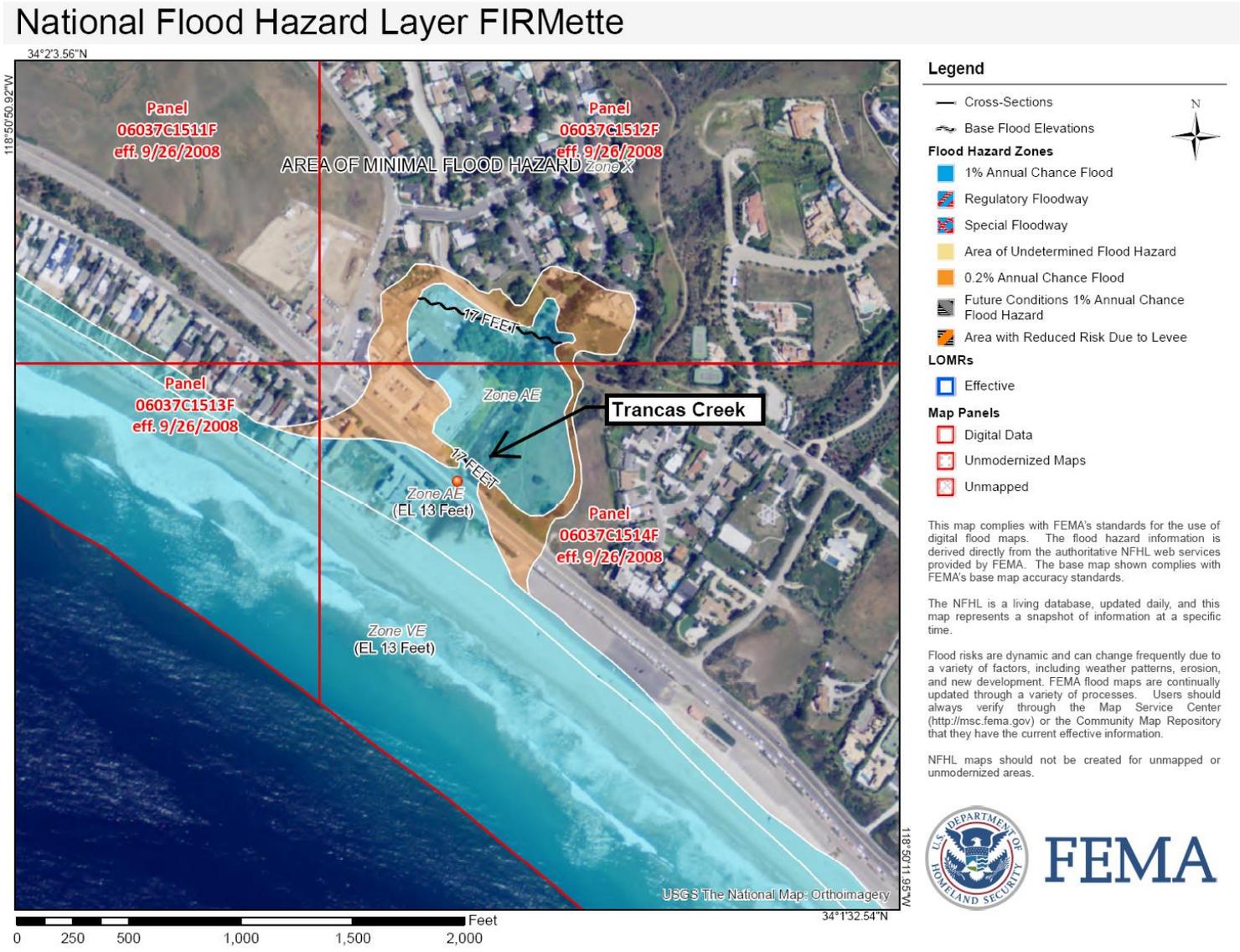
The Federal Emergency Management Agency (FEMA) provides information on flood hazards and frequency for cities and counties, based on its Flood Insurance Rate Maps (FIRMs). A FIRM is the official map of a community for which FEMA has delineated the Special Flood Hazard Areas (SFHAs) to indicate flood hazard potential and identify the risk premium zones applicable to the community under the National Flood Insurance Program. Figures 2-16 and 2-17 are flood zone maps depicting the project area relative to the base 100-year floodplain. SFHAs are defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual flood chance is also referred to as the base flood or 100-year flood. The SFHA includes designated Zones A, AE, AH, AO, AR, A99, V, and VE.

In referencing the FIRM for Los Angeles County, California, and Incorporated Areas, Panel 1514F (Map No. 06037C1514F) (Figure 2-17), the proposed project is located in areas designated as Zone AE and Zone X. In accordance with the National Flood Insurance Program, Zone AE is a designated SFHA, while Zone X is not a designated SFHA. Flood insurance is not necessary in Zone X areas because they are considered areas of minimal flood hazard and above the 500-year flood level. Accordingly, the project site is only partly within the 100-year floodplain (Zone AE), because most of the project area is in Zone X, as depicted on Figures 2-16 and 2-17. The base flood elevation (BFE) of Zone AE in the project area ranges from approximately 13 feet on the downstream side of PCH, where Trancas Lagoon spills out into the ocean, to 17 feet on the upstream side of PCH, where the channelized creek bed flows down into Trancas Lagoon before passing under the Trancas Creek Bridge, as depicted on Figure 2-17.



Figure 2-16 Federal Emergency Management Agency Flood Zone Map

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2.7.3 Environmental Consequences

2.7.3.1 Alternative 1 – No Build Alternative

If the proposed project were not built, there would be no alterations or improvements to the existing bridge structure, thereby posing no changes to the existing environment, and requiring no disturbance of soils or increase in impervious areas. Therefore, the Alternative 1 would not present any potential impacts in terms of hydrology and floodplain encroachment.

2.7.3.2 Alternative 2 – Short Bridge Replacement

As previously discussed, the proposed project is partly in Zone AE of the base floodplain, including the bridge structure itself, which according to FEMA FIRM panels, has a BFE of approximately 13 feet on the downstream side of the bridge facing the Pacific Ocean and 17 feet on the upstream side. Because the proposed project would partly encroach onto the base floodplain, a Final Hydraulic Report¹ was prepared to assess the risk involved with this project alternative. In accordance with FHWA regulations (23 CFR 650 Subpart A), if an increase in the BFE is anticipated, a hydraulic computer model must be run to establish the amount of increase to determine the floodplain encroachment impacts. In accordance with this requirement, the Final Hydraulic Report findings and results of the hydraulic model are presented and discussed below (Table 2.9).

Table 2.9 Hydraulic Model Results for Alternative 2

FEMA 100-Year Flood Event (7,040 cfs)	
Scenario	120 ft New Bridge
Water Surface Elevation	18.4 ft
Average Velocity	7.1 ft/sec
Lowest Soffit Elevation	20.5/20.3 ft (two ends up/downstream)
Vertical Clearance	1.9 ft

cfs = cubic feet per second

ft = feet

FEMA = Federal Emergency Management Agency

ft/sec = feet per second

According to the hydraulic model, the short bridge design under Alternative 2 would exhibit a BFE of approximately 18.4 feet, which would be an increase of 5.4 feet relative to the BFE of 13 feet downstream of the bridge, and an increase of 1.4 feet relative to the BFE of 17 feet upstream of the bridge, as shown on Figure 2-17. However, the proposed project would only partially encroach into Zone AE, and the modeled BFE increase of 5.4 feet occurs in a limited area, downstream of Trancas

¹ California Department of Transportation. 2017. Final Hydraulic Report.

Lagoon, where the BFE is 13 feet. This area includes the proposed structure's main span footprint. On this side of the proposed bridge, Trancas Creek outlets directly into the Pacific Ocean, thereby reducing flood-related risks on the downstream side due to ample amounts of spillway area. During a 100-year flood event, flood waters would primarily be anticipated from the upstream side, flowing down via Trancas Creek, and ultimately flowing under the Trancas Creek Bridge and out into the ocean. Most of the project area lies in Zone X (beyond the 500-year flood zone), or in portions of Zone AE where the BFE is higher at 17 feet (upstream of the bridge). Therefore, there would be a minimal increase of 1.4 feet to the BFE in the areas upstream of the proposed bridge that are beyond the proposed structure's footprint.

Additionally, the proposed bridge structure would feature a lowest soffit elevation (i.e., the underside of the bridge deck) of approximately 20.5 feet on the upstream side and 20.3 feet on the downstream side. As a result, the proposed bridge would have sufficient vertical clearance to remain fully above water during a 100-year flood event because the BFE would rise to 18.4 feet, which is below the structure's lowest elevations. Because the bridge would have sufficient vertical clearance, the structure is unlikely to be impacted by flood waters. As a result, the interruption of or termination of operations on PCH is not anticipated under Alternative 2, and the safety and reliability of the bridge would not be jeopardized during a 100-year flood event. Although the BFE would increase by 5.4 feet and 1.4 feet downstream and upstream of the bridge, respectively, according to the hydraulic model, this increase would be minimal and the bridge would still have sufficient vertical clearance. Therefore, there would be no significant floodplain encroachment impact under Alternative 2.

In addition, Alternative 2 would serve the purpose of the project because it would provide the traveling public with a reliable and safe bridge structure that will facilitate travel in the City of Malibu. This would be achieved because the structure would have enough vertical clearance for flood waters to pass beneath the bridge during a 100-year flood event. Therefore, travel in the City of Malibu would not be impeded during a 100-year flood. Moreover, the need for the project would be addressed because reliable access between communities along this segment of PCH would be maintained during a 100-year flood event (Table 2.9).

2.7.3.3 Alternative 3 – Long Bridge Replacement (Preferred Alternative)

According to the hydraulic model, the longer bridge design under Alternative 3 would exhibit a BFE of approximately 13.8 feet, which would be an increase of 0.8 foot relative to the BFE of 13 feet, as shown on Figure 2-17. However, the proposed project would only partially encroach into Zone AE, and the modeled BFE increase of 0.8 foot occurs in a limited area downstream of Trancas Lagoon, where the BFE is 13 feet. Most of the project area lies in Zone X (beyond the 500-year flood zone) or in portions of Zone AE, where the BFE is higher at 17 feet (upstream of the bridge). Therefore, there would be no increase to the BFE, and no significant floodplain encroachment in the areas upstream of the proposed bridge and PCH or in the southern and northern limits of the project site (along PCH).

Additionally, the proposed bridge structure would have a lowest soffit elevation (i.e., the underside of the bridge deck) of approximately 14.2 feet. As such, the proposed bridge would have sufficient vertical clearance to remain fully above water during a 100-year flood event because the BFE would rise to 13.8 feet, which is below the structure's lowest elevation. Because the bridge would have sufficient vertical clearance, the structure is unlikely to be impacted by flood waters. As a result, the interruption or termination of operations on PCH is not anticipated under Alternative 3, and the safety and reliability of the bridge would not be jeopardized during a 100-year flood event. Although the BFE would increase by 0.8 foot, according to the hydraulic model, this increase would be minimal and the bridge would still have sufficient vertical clearance. Therefore, there would be no significant floodplain encroachment impact under Alternative 3.

In addition, Alternative 3 would serve the purpose of the project because it would provide the traveling public with a reliable and safe bridge structure that will facilitate travel in the City of Malibu. This would be achieved because the structure would have enough vertical clearance for flood waters to pass beneath the bridge during a 100-year flood event. Therefore, travel in the City of Malibu would not be impeded during a 100-year flood. Moreover, the need for the project would be addressed because reliable access between communities along this segment of PCH would be maintained during a 100-year flood event (Table 2.10).

Table 2.10 Hydraulic Model Results for Alternative 3

FEMA 100-Year Flood Event (7,040 cfs)	
Scenario	240 ft New Bridge
Water Surface Elevation	13.8 ft
Average Velocity	4.8 ft/sec
Lowest Soffit Elevation	14.2 ft
Vertical Clearance	0.4 ft

cfs = cubic feet per second

FEMA = Federal Emergency Management Agency

ft = feet/foot

ft/sec = feet per second

2.7.4 Avoidance, Minimization, and/or Mitigation Measures

The proposed project improvements under Alternatives 2 and 3 are not anticipated to cause significant floodplain encroachment impacts because both build alternatives would result in a minimal increase in the BFE and would have sufficient vertical clearance to avoid flood waters during a 100-year flood event. As a result, both build alternatives would not require any avoidance, minimization, and/or mitigation measures.

Other avoidance measures that would minimize any potential impact of the proposed project's drainage characteristics are addressed in Section 2.8, Water Quality and Storm Water Runoff.

2.8 Water Quality and Storm Water Runoff

2.8.1 Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source¹ unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCB) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional

¹ A point source is any discrete conveyance such as a pipe or a man-made ditch.

permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of the USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's Section 404 (b)(1) Guidelines (U.S. EPA Code of Federal Regulations [CFR] 40 Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent¹ standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered

¹ The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

waters of the U.S. Additionally, it prohibits discharges of “waste” as defined, and this definition is broader than the CWA definition of “pollutant.” Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including municipal separate storm sewer systems (MS4s). An MS4 is defined as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches,

human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water.” The SWRCB has identified Caltrans as an owner/operator of an MS4 under federal regulations. The Caltrans MS4 permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Caltrans MS4 Permit (Order No. 2012-0011-DWQ) was adopted on September 19, 2012 and became effective on July 1, 2013. The permit has three basic requirements:

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. Caltrans storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the Maximum Extent Practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, Caltrans developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices that Caltrans uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of Best Management Practices (BMPs). The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or

greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop storm water pollution prevention plans; to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). In accordance with Caltrans Standard Specifications, a Water Pollution Control Plan (WPCP) is necessary for projects with DSA less than one acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as Waste Discharge Requirements (WDRs) under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

2.8.2 Affected Environment

The water quality and storm water runoff discussion has been excerpted from multiple sources, including the Draft Storm Water Data Report prepared by the Caltrans Office of Design (March 2017), North Santa Monica Bay Coastal Watershed Enhanced Watershed Management by the City of Malibu (2017), Trancas Lagoon Restoration Feasibility Study by the RCD-SMM (August 2015), and independent research performed by the Caltrans Division of Environmental Planning.

2.8.2.1 Regional Drainage

Trancas Creek is part of the North Santa Monica Bay Coastal Watershed (Figure 2-18) on the western slope of the Santa Monica Mountains, which includes 58,214 acres (203 square miles) and comprises 16 subwatersheds: Arroyo Sequit, Los Aliso, Encinal, Trancas, Zuma, Ramirez, Escondido, Latigo, Solstice, Corral, Carbon, Las Flores, Piedra Gorda, Pena, Tuna, and Topanga. These watersheds are located in the northwest corner of Los Angeles County, bounded on the north, west, and east by the Santa Monica Mountains and on the south by the Pacific Ocean. The watersheds consist primarily of natural open space with significant land areas dedicated as parkland. These watersheds are largely undeveloped, with much of the land area protected by the Santa Monica Mountains National Recreation Area, California State Parks, and other land conservation organizations. Land use includes 44 percent residential, 35 percent rural, 6 percent commercial, 4 percent industrial, and 11 percent other. The total population is about 1 million.

2.8.2.2 Local Drainage

Trancas Creek is located 3 miles west of Point Dume in the City of Malibu. The watershed occupies about 8.7 square miles and generates significant but short duration peak flows, which accumulate in the remnant lagoon adjacent to the Pacific Coast Highway Bridge. The wetland is about 2 acres in size. Most of the watershed is undeveloped open space, with limited impervious surfaces of roadway, single-family residential development, two flood control channels, and a commercial development immediately adjacent to the project. Trancas Creek contains a combination of dikes and natural barriers, and concrete-lined and soft bottom segments, including some natural vegetation. All the water is from surface water runoff. Trancas Creek is a flood-controlled waterway managed by the Los Angeles County Department of Public Works. The mouth of Trancas Creek is often blocked by a sand berm that prevents tidal exchange with the ocean and causes the creek water to pond; the berm is sometimes breached during storm events that cause high water flows.

maintenance activities to maintain existing highways (facilities), structures, and existing functions. Asphalt concrete, Portland cement concrete, aggregate base, shoulder backing, bridge decks, sidewalks, buildings, road side ditches, gutters, dikes, and culverts are all part of existing highway facilities and are not considered in the calculation of DSA.

Proposed project construction can involve grading and soil compaction, an increase in impervious surfaces (e.g., bridge, roadway approaches, sidewalks), or a reduction of vegetative cover, all of which reduce infiltration and increase the amount of rainfall that ends up as runoff. When precipitation soaks into the ground, or infiltrates, some of it moves very slowly toward stream channels as groundwater and is gradually released over days, weeks, or months. Paving undeveloped areas would increase the amount of impervious surface area, reducing the rate of infiltration and increasing the amount of surface runoff that flows into collection channels and creeks. Therefore, increasing the amount of impervious area in a watershed increases the total amount of water that a receiving channel must convey, and also increases the peak flow rate.

The proposed project operations are anticipated to slightly increase runoff volume, but are not expected to affect downstream flow, create additional sediment loading, or cause other hydraulic changes due to increases in DSAs and net additional impervious areas (AIAs). Changes in DSA and AIA for each build alternative are presented in Table 2.11.

Table 2.11 Disturbed Soil Areas and Net Additional Impervious Area

Alternatives	DSA (acres)	AIA (acres)
Alternative 1 (short bridge)	1.02	0.12
Alternative 2 (long bridge)	1.02	0.06
No Build Alternative	NA	NA

AIA = additional impervious area

DSA = disturbed soil area

NA = not applicable

During construction of the new bridge, temporary soil disturbance impacts for access and equipment storage would be expected within Trancas Creek for approximately 5 to 7 months of construction during the non-rainy season.

Net additional impervious area will result from the installation of rock riprap on the abutments to protect the bridge from erosion.

Total Maximum Daily Loads

A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. Water quality standards are set by the California RWQCB, which identifies the uses for each waterbody (e.g., drinking water supply, contact recreation [swimming], and aquatic life support [fishing]), and the scientific data to support that use. A TMDL is the sum of allowable loads of a single pollutant from all contributing point and nonpoint sources. The calculation must include a margin of safety to ensure the waterbody can be used for the purposes the State has designated. The calculation must also account for seasonal variation in water quality. The CWA, Section 303, establishes the water quality standards and TMDL programs.

The proposed project is located in the Los Angeles Regional Water Quality Control Board (LARWQCB) jurisdiction, Region 4; there is no potential for significant water quality impairment resulting from the proposed project. Trash and pollutants from the nearby parking lot are reportedly deposited into the lagoon. Designated Beneficial Uses for Trancas Creek are Municipal and Domestic Supply (MUN), Navigation (NAV), Water Contact Recreation (except areas channelized in concrete) (REC-1), Non-Contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), and Rare, Threatened or Endangered Species (RARE).

Trancas Creek has not been evaluated for inclusion in the 303(d) list of impaired water bodies. However, ocean waters adjacent to the beach have exceeded selected criteria for fish consumption and recreation, there is an advisory regarding polychlorinated biphenyls (PCBs) and dichlorodiphenyltrichloroethane (DDT), and coliform bacteria counts have led to beach closures.

Caltrans will comply with the TMDL standards. Project engineers shall consider treatment controls for the project and shall consult with the Caltrans NPDES Storm Water Coordinator.

Other Water Quality Concerns

As previously stated, the proposed project lies in the LARWQCB, specifically in the North Santa Monica Bay Watershed. Storm water runoff in the project study area discharges through the natural drainage systems, through the concrete-lined channels, and out through Trancas Lagoon to the Pacific Ocean.

The 303(d) list is a list of impaired and threatened waters (stream/river segments and lakes) for which the CWA requires prioritization and development of TMDLs based

on the severity of pollution and the sensitivity of the uses to be made of the waters. In Trancas Beach (Broad Beach), the pollutants of particular concern are PCBs, DDT (fish consumption advisory), and fecal coliform.

Construction-Related Effects

Work would occur inside Trancas Creek, which is considered a waters of the U.S. as well as a waters of the State of California. Thus, the proposed project would require a CWA Section 404 permit, a CWA Section 401 water quality certification, and a Fish and Game Code Section 1600 Streambed Alteration Agreement. While construction activities have the potential to increase discharge of accidental pollutants into the creek, the required implementation of temporary BMPs will reduce that potential. BMPs are designed to maintain construction areas in such a condition that storm flows do not carry pollutants offsite into the drainage system or other water bodies. The construction site BMP strategies are discussed below.

National Pollutant Discharge Elimination System

Section 402 of the CWA establishes a permitting system for the discharge of any pollutant (except dredge or fill material) into waters of the U.S. An NPDES permit is required for all point discharges of pollutants to surface waters where a point source is defined as a discernible, confined, and discrete conveyance (e.g., a pipe, ditch, or channel).

Storm Water Best Management Practices

“Storm water BMPs” is a term used to describe a type of water pollution control. Storm water BMPs are techniques, measures, or structural controls used to manage the quantity and improve the quality of storm water runoff. The goal is to reduce or eliminate the contaminants collected by storm water as it moves into streams and rivers to maintain the water quality, which protects both the environment and public.

Temporary Construction Best Management Practices

The duration of construction for the proposed project is estimated to be between 12 and 16 months, depending on the alternative selected. Whenever possible, every effort shall be made to schedule work and earth-disturbing activities inside Trancas Creek and Trancas Lagoon to avoid anticipated rain events. BMPs will be used to further reduce impacts to water quality.

2.8.4 Avoidance, Minimization, and/or Mitigation Measures

- WQ-1** In accordance with the Los Angeles County Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit, a storm water management program shall be implemented per the Municipal Separate Storm Sewer System (MS4) permit. For compliance with the Caltrans NPDES permit, a storm water management program shall be developed for pre-construction, construction, and post-construction best management practices (BMPs) in California Department of Transportation (Caltrans) right-of-way.
- WQ-2** Work within Trancas Creek and Trancas Lagoon shall be scheduled to occur between May 2 and September 30 to avoid the rainy season.
- WQ-3** To reduce the potential for any potential runoff or run-on in the project area, construction site BMPs shall be installed prior to the start of construction. Additionally, the contractor shall be responsible for the implementation of BMPs including but not limited to:
- Runoff control measures shall be placed at the top of all excavation and embankment slopes.
 - Slope protection/slope interruption devices shall be implemented on applicable slopes during the construction period and, wherever possible, early implementation of permanent erosion control seeding or landscape planting shall be performed.
 - The contractor shall provide and maintain stabilized construction site entrances and exits throughout.
 - Regular watering of non-paved sites shall be performed, along with regular street sweeping and vacuuming on paved surfaces.
 - All slopes shall be protected with fiber rolls, silt fences, temporary slope drains, and early slope paving or landscaping as defined in the approved Storm Water Pollution Prevention Plan (SWPPP), especially during the rainy season from October 1 to May 1.
 - The total active disturbed soil area (DSA) in the proposed project limits will be maintained to a minimum by focusing on construction activities that avoid earthwork and by implementing the approved construction site BMPs.

- The contractor will be required to manage all stock piles against wind and water erosion and contain concrete wastes with concrete washouts.
- All catch basins and drainage inlets will include gravel bag berms or storm drain inlet protection.
- For all construction equipment, fuels, and toxic chemicals, spill prevention and spill control measures will be implemented throughout the duration of construction.
- No heavy construction equipment should be stored on the beach zone, and all heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in non-operating status.
- A “Wash-out Pan” should be used to wash down any equipment that handles concrete or other chemical-based construction materials.

2.9 Geology/Soils/Seismic/Topography

2.9.1 Regulatory Setting

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

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. The Caltrans Office of Earthquake Engineering is responsible for assessing the seismic hazard for Caltrans projects. Structures are designed using the Caltrans Seismic Design Criteria. The Seismic Design Criteria provides the minimum seismic requirements for highway bridges designed in California. A bridge’s category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities.

2.9.2 Affected Environment (Geology, Soils, Seismicity, and Topography)

Caltrans prepared the Structure Preliminary Geotechnical Report for the Trancas Bridge Replacement project in April 2012.

The project area lies in the northwestern corner of the Los Angeles Basin geographic area, north of Santa Monica. The Santa Monica Mountains and the City of Malibu are located in this part of the basin. Malibu lies at the boundary of two major geomorphic ranges, the Peninsular (northwest-oriented rock grain) and Transverse (east-west rock grain). Elevations of the Santa Monica Mountains range from sea level to a maximum height of about 1,700 feet above sea level at the steep and rugged hillsides, valleys, and canyons farther inland from the project site. The project site elevation at the top of the existing bridge is 16 feet to 17 feet above mean sea level.

Based on the Seismic Hazard Zone Maps, the site is in a Liquefaction Zone (*Point Dume* quadrangle, Official Map, February 2002; shown on Figure 2-19). Liquefaction is a phenomenon where saturated, cohesionless soils lose their grain-to-grain contact and exhibit flow characteristics like a liquid medium. The liquefaction risk for the site location is characterized as having moderate to high susceptibility due to the medium dense sandy soils.

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Figure 2-19 Pt. Dume Quadrangle, Seismic Hazard Zone Map

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2.9.2.1 Soils

More than 80 percent of the soils in the Santa Monica Mountains have been identified by the Soil Conservation Service as having a high or very high erosion potential. The project location has two soil types: alluvial stream deposits and artificial fill (Figure 2-20). Alluvial soil types in the Coastal Plain, where the project is located, consist of sand, gravel, silt, and clay and are transported by rivers flowing to the ocean. Over time, the area surrounding the project site, which was built on artificial fill, was filled over with deposits of alluvial sediment derived from the hills and mountains surrounding the basin. The alluvial sediments are underlain by a thick sequence of primarily Neogene, marine sediments that overlie Mesozoic, crystalline, basement rocks at great depth. Artificial fill, on the other hand, is made of generally loose rocks, gravel, and soils as a result of man-made activity (e.g., dredging, construction, and excavated earth) from highway and oil development projects.

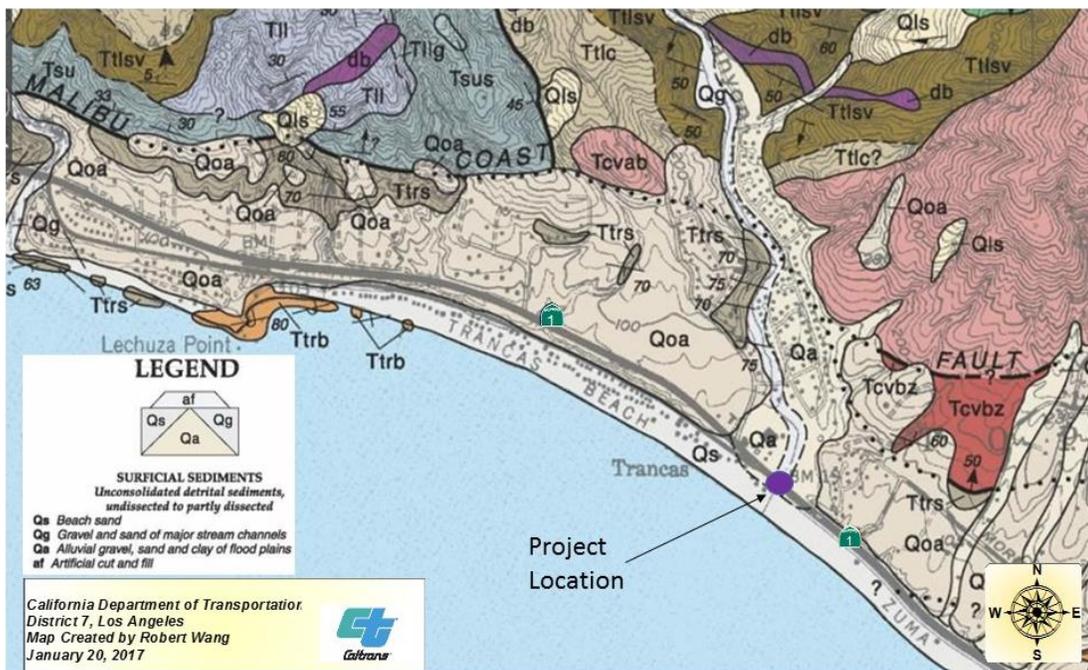


Figure 2-20 Soil Types Map

Caltrans Corrosion Guidelines, Section 5.5, states that Caltrans considers a site's soils to be corrosive if one or more of the following conditions exist for soil and/or water samples taken from the site:

- The chloride concentration is greater than or equal to 500 parts per million (ppm)
- The sulfate concentration is greater than or equal to 2,000 ppm
- The percentage of hydrogen (pH) is 5.5 or less

Due to the close proximity of the site to the ocean and the potential for wave action reaching the Trancas Creek Bridge, the site is considered corrosive to common construction materials. Testing will be done in the future to validate compliance with Caltrans Corrosion Guidelines.

Groundwater for the project location was encountered between 3- and 5-foot depths. The groundwater levels at these locations may vary with tidal fluctuations and are considered relatively shallow due to the proximity of the coastline and creek bottom.

2.9.2.2 Geologic Hazards

Seismic Hazards

The Los Angeles region is a very seismically active region, with numerous large regional faults. An active fault is defined by the State of California as a “...sufficiently active and well-defined fault that has exhibited surface displacement within the last 11,000 years.” The active faults in the study area are capable of producing seismic shaking that could be damaging to bridges and other structures (Table 2.12). The nearest active fault to the project site is located 0.5 mile northeast of the Malibu Coast fault zone (Figure 2-21).

Table 2.12 Potential Seismic Sources

Fault	Approximate Closest Distance to Study Area (miles)	Fault Type	Maximum Credible Earthquake ¹ Moment Magnitude
Malibu Coast Fault Zone	0.125	Left Lateral Strike Slip (LLSS)	6.7
Santa Monica (offshore)	3.37	Reverse (REV)	5.9
Anacapa-Dume	3.60	Strike Slip (SS)	5.3

Sources: *Structure Preliminary Geotechnical Report*, April 2, 2012, and Malibu General Plan, Safety and Health Element (Geology and Topography).

¹ Maximum Credible Earthquake is defined as the largest earthquake that appears to be reasonably capable of occurring under the conditions of presently known “geologic framework.”



California Geological Survey,
Seismic Hazard Mapping Program

Map Created by Robert Wang, Division of
Environmental Planning January 24, 2017

Figure 2-21 Malibu Coast Fault Zone

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Ground Shaking

Ground shaking is the primary cause of structural damage during an earthquake; it is considered to be the most likely damage-producing earthquake phenomenon related to this project. Magnitude, duration, and vibration frequency will vary greatly, depending on the fault and distance from the project. The Malibu area is subject to moderate to strong ground shaking from local and more distant earthquake events.

The Malibu Coast fault is the nearest major earthquake fault to the project.

Liquefaction

Soil liquefaction occurs when saturated loose soils lose their strength due to excess water in the soils. The potential for liquefaction exists when fine silts and sand sit just below the water table. Liquefaction has been documented to affect soils to about 50 feet deep during prolonged periods of ground shaking.

When liquefaction occurs, the strength of the soil decreases and the ability of the soil to support building and bridge foundations is reduced. Liquefaction may result in settlement of the ground surface, additional forces pushing down on foundation piles as a result of soil settlement above the liquefied layers, and reduction of shear strength of the liquefied soils, resulting in reduced load-carrying capacity. Liquefied soils can also exert pressure on retaining walls, which can cause them to tilt or slide.

Based on the soil types (alluvial stream deposits consisting of sands and gravels) at the project site, it was concluded that liquefaction potential exists at the project site due to the depth of groundwater at 3–5 feet.

Tsunami

Tsunami, which is a Japanese word for “harbor wave,” is a sea wave of local or distant origin that results from large-scale seafloor displacement. Tsunamis evolve through three overlapping processes: generation by any force (e.g., earthquake) that disturbs the water column, propagation from deeper water near the source to shallow coastal areas, and finally, inundation of dry land. The proposed Trancas Bridge Replacement project is located 800 feet onshore off the coastline of the Pacific Ocean. Based on the Tsunami Map for Emergency Planning, the project is considered susceptible to tsunami hazard (Figure 2-22).

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Source: State of California, Tsunami Inundation Map for Emergency Planning, Point Dume, March 1, 2009. http://www.conservation.ca.gov/ogs/geologic_hazards/Tsunami/Inundation_Maps/#DownloadData

Map Created by Robert Wang, Division of Environmental Planning January 25, 2017

Figure 2-22 Tsunami Map for Emergency Planning

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2.9.3 Environmental Consequences

2.9.3.1 No Build Alternative – Alternative 1

If the bridge is not replaced, there will be no change to the existing conditions.

2.9.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

A search of Caltrans records indicates that no major slipouts, landslides, or other geotechnical problems have occurred in the project area.

Both build alternatives would result in a new bridge that is built to current seismic standards. Geotechnical exploration will be conducted to determine groundwater levels, soil types and strengths, corrosion, susceptibility to liquefaction and settlement, and any areas that require dewatering. Several investigative methods should be used, including but not limited to, geologic mapping, soil borings (mud rotary borings), cone penetrometer studies, and geophysical studies that evaluate soil liquefaction potential and shear strength.

Once the required site exploration is completed, the Office of Bridge Design will prepare a Preliminary Foundation Report to present the results of the site exploration (i.e., soil strength, consolidation, classification, corrosion, and liquefaction potential) and make preliminary foundation design recommendations in order to facilitate “type selection” for the type of bridge foundation that is appropriate for the given soil/geologic condition.

2.9.4 Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required.

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2.10 Hazardous Waste or Materials

2.10.1 Regulatory Setting

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

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

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the California Health and Safety Code and is authorized by the federal government to implement RCRA in the State. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts the disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and clean up

contamination include Title 22, Division 4.5, Environmental Health Standards for the Management of Hazardous Waste; Title 23, Waters; and Title 27, Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. The proper management and disposal of hazardous material is vital if hazardous material is found, disturbed, or generated during project construction.

2.10.2 Affected Environment

This section of the MND/FONSI evaluates the potential impacts on hazardous materials, hazardous waste, and contamination associated with implementation of the proposed project alternatives. The analysis presented in this section is based on the following technical study: *Hazardous Waste Assessment for PA/ED for the Trancas Creek Bridge Replacement Project*, Caltrans Office of Environmental Engineering (February 14, 2017).

The proposed project site is a typical freeway bridge structure providing vital north-to-south access across Trancas Creek on PCH in the City. The area surrounding the project site appears generally undeveloped with open green space sloped toward the Trancas Creek bed on the north side of the road and a wide, sandy ocean beach on the south. Historical sources including aerial photographs and topographic maps indicate that a roadway in the current alignment of PCH was first shown in 1928 aerial photographs and on 1929 topographic maps. The area surrounding the roadway and bridge (i.e., Fee and TCE areas) has appeared to be vacant and has remained in a natural, undisturbed state since the start of records.

During the initiation phase of the proposed project, a general screening was performed to determine the potential to encounter hazardous waste, hazardous materials, and contamination, and assess the need for subsequent studies. The screening generally consists of project evaluation, a departmental record review, regulatory agency records review, and a general field visit. An Initial Site Assessment was conducted as part of the Hazardous Waste Assessment prepared for this project, and the site assessment identified general existing hazardous waste concerns for all Build Alternatives. Of particular concern were the potential occurrence of hazardous waste/materials related to existing yellow thermoplastic traffic stripe and pavement markings, aerially deposited lead (ADL), treated wood waste (TWW), asbestos-

containing materials (ACM), and lead-based paint (LBP), and groundwater (presented in Table 2.13).

Table 2.13 General Hazardous Waste/Materials of Concern in the Project Study Area

Hazardous Waste/Materials of Concern	Occurrence
Existing Yellow Traffic Striping and Pavement Markings	The existing yellow thermoplastic and lead-based painted traffic stripe and/or pavement markings will be disturbed and/or removed during construction of the proposed project. Yellow thermoplastic traffic stripe and markings applied prior to 2006 and yellow traffic paint stripe and/or pavement markings applied prior to 1997 may contain high concentrations of lead and chromium. Residue produced from their removal may contain heavy metals at concentrations that exceed hazardous waste threshold limit concentrations in Title 22 of the California Code of Regulations (22 CCR).
Aerially Deposited Lead (ADL) Contaminated Soils	Soils in the project vicinity, particularly in areas that are unpaved, have the potential for ADL contamination, related to previous and historical use of leaded gasoline additives. Particulate emissions in engine exhaust contained lead from leaded gasoline, which was deposited in unpaved areas adjacent to roadways and potentially from runoff to roadway embankments and adjacent right-of-way.
Treated Wood Waste (TWW)	The removal and disposal of the metal beam guardrail is a hazardous waste concern because the associated wood posts typically are treated with preservation chemicals that protect the wood against insect attack and fungal decay. These chemicals may be hazardous (carcinogenic) and include, but are not limited to, arsenic, chromium, copper, creosote, and pentachlorophenol.
Asbestos-Containing Materials (ACM)	Structural demolition work at the Trancas Creek Bridge (associated with all Build Alternatives) has the potential to generate ACM hazardous waste, which may be present in the construction materials used in the bridge structure and/or structural elements (i.e., concrete, drainage piping, joint seals, and railing shim plates), as well as in the rusty abandoned pipes found under the existing bridge.
Lead-Based Paint (LBP)	Structural demolition work at the Trancas Creek Bridge (associated with all Build Alternatives) has the potential to generate LBP hazardous waste, which may be present in paint materials used on the bridge structure and/or structural elements.
Groundwater	Groundwater will be encountered during construction that requires dewatering. Groundwater testing will be conducted during the final design phase in order to apply for necessary storm water and/or discharge permits, and address potential contamination due to nearby sources and confirm any impacts from releases.

ACM = asbestos-containing materials
ADL = aerially deposited lead
CCR = California Code of Regulations

LBP = lead-based paint
TWW = treated wood waste

2.10.2.1 Potential Occurrence of Contamination in Parcels Associated with the Proposed Project

During the screening process, it was determined that subsequent studies would be required to fully assess the potential for contamination in parcels associated with the proposed project, especially because the proposed project includes extensive excavation, structure modification and demolition, dewatering, and acquisition of right-of-way (Fee and TCE). A database search was completed of records and compiled information on sites that generate, store, transfer, treat, or dispose of

hazardous substances and/or petroleum products. The search also identified sites that contain, or may contain, hazardous substances that pose the threat of a future release to the environment.

The Environmental Data Resources database search revealed four sites within a radius of 0.125 mile from the proposed project area as recognized environmental conditions (RECs) that have or may have been impacted by hazardous substances and/or petroleum products. These sites include two gasoline stations, a dry cleaning business, and a County of Los Angeles water treatment plant. However, at the time of preparation of the draft environmental document, there was insufficient information to fully identify any impact from these past land uses on the soil and/or groundwater beneath the proposed project area. Therefore, additional investigation will be required during the final design phase, which will be initialized by the Caltrans Office of Environmental Engineering. The key records on the four sites are presented in the Table 2.14.

2.10.3 Environmental Consequences

2.10.3.1 No Build Alternative – Alternative 1

If the proposed project were not built, there would be no demolition or replacement of the existing bridge structure, no change to the existing environment, and no disturbance of soils. Therefore, there would be no potential for exposure to hazardous waste and/or materials.

2.10.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Potential Exposure to General Hazardous Waste/Materials of Concern

Soil excavation and earthmoving activities associated with all Build Alternatives of the proposed project could expose workers to contaminants associated with existing thermoplastic traffic striping/pavement markings, ADL, groundwater, and TWW. Structural demolition work associated with all Build Alternatives has the potential to expose workers to contaminants associated with ACM and LBP.

During construction, exposure to contaminants associated with existing thermoplastic traffic striping/pavement markings and TWW can be avoided fully, or minimized as needed, through adherence to protocols for their removal, handling, and disposal. Furthermore, a project-specific ADL investigation would be implemented to more accurately assess lead-impacted soils in the project study area. The scope of the

**Table 2.14 Potential Occurrence of Contamination in Parcels
Associated with the Proposed Project**

Parcel Owner/Address	APN No.	Occurrence
Trancas Country Market (formerly Mobil Oil Station No. 11-GT1) 30735 Pacific Coast Highway	4469-045- 001	This parcel is located about 0.037 mile from the project site and had an underground tank in the past, for which an abatement was completed and the case was closed on August 29, 1996. No information was available on Geotracker indicating that the extent of contamination was delineated or if a cleanup action was required. This site is a REC and requires further investigation to determine any impacts to the project area.
Trancas Country Market (formerly Trabucas Cleaners) 30765 Pacific Coast Highway	4469-045- 001	This parcel is located about 0.064 mile from the project site and was shown on record as "No violation found." This site is a potential source of tetrachloroethylene (TCE) and the site will be investigated during the final design phase to determine any impacts to the project area.
Chevron USA SS 357 30811 West Pacific Coast Highway	4470-012- 001	This parcel is located about 0.105 mile from the project site and has multiple underground storage tanks that are being actively monitored by various agencies. Geotracker reports that the releases from the Leaking Underground Storage Tanks were detected at maximum concentrations of total petroleum hydrocarbons gasoline (TPHg) (6,100 µg/L), benzene (1.5 µg/L), toluene, ethylbenzene, xylene, and MTBE (5.5 µg/L) groundwater (Cambria Second Quarter 2006 Groundwater Monitoring and Status Report, June 16, 2006). Groundwater was encountered at 18 to 24 feet bgs in the groundwater monitoring wells. An investigation performed in 1991 reported detections of TCE up to 2 mg/kg at 6 feet bgs. The source of the TCE was not identified. A cleanup action on the site consisted of removal of 25 cubic yards of soil near the dispenser islands. No groundwater remediation was mentioned. In July 2006, the site was still an active fueling station but received closure with the condition that some of the groundwater monitoring wells remain and be monitored. Geotracker does not have any groundwater monitoring reports posted after the June 2016 report. Because there were potential impacts to groundwater and the case received site closure, there may be residual contamination in the soil and groundwater with no cleanup action having taken place. Therefore, the site is a controlled REC and requires further investigation to determine any impacts to the project area.
Los Angeles County Department of Public Works Trancas Plant 6338 Paseo Canyon Drive	4469-045- 900	This parcel is located about 0.124 mile from the project site and its case was closed on February 2, 2003. This status is a designation that remedial actions or level of remediation achieved is satisfactory to conclude environmental studies and cleanup. However, residual contamination in soil and groundwater were not disclosed. This site is a REC and requires investigation to determine impacts to the project area and if special handling of soil and groundwater generated during construction is required.

µg/L = micrograms per liter
bgs = below ground surface
mg/kg = milligram(s) per kilogram
MTBE = methyl tertiary-butyl ether

PCE = tetrachloroethylene
REC = recognized environmental condition
TPHg = total petroleum hydrocarbons gasoline

ADL investigation would be dictated by which Build Alternative is selected and, more specifically, by construction features during the final phases of design.

Additionally, groundwater would be encountered during construction that would require dewatering. As a result, groundwater would need to be tested during the final

design phase to assess and determine the extent of potential contamination. The test data would also be necessary when applying for National Pollutant Discharge Elimination System permits and Waste Discharge Requirements from the Regional Water Quality Control Board for discharge into municipal storm drains, applying for a permit from the Los Angeles County Sanitation District for discharge to the municipal sewer, or disposal. Groundwater testing would also address potential contamination due to nearby sources and would confirm any impacts from past releases.

During demolition of the existing bridge, there is a hazardous waste concern that ACM and LBP might exist in the bridge structure or structural elements as well as in the rusty, abandoned pipes under the bridge. Therefore, to meet the National Emission Standards for Hazardous Air Pollutants, an asbestos survey by a certified asbestos consultant would be required during the final design phase to determine if ACM is present in the bridge structure. If the bridge contains ACM, abatement would be required. Furthermore, an LBP survey would be required to determine the concentration of lead in the paint on the bridge and in the surrounding soil.

Once surveys are complete, results would be used to determine worker protection, removal, and disposal requirements for the abatement work plans of any ACM or LBP.

Recommendations for Additional Site Investigations

Because the Initial Site Assessment identified potentially contaminated sites or properties during the regulatory database search, further investigation and evaluation is required to more adequately determine contamination and the risks associated with remediation. A Phase I Environmental Site Investigation is recommended for the former Mobil Oil Station No. 11-GT1 site (30735 Pacific Coast Highway) and the Chevron USA SS 357 site (30811 West Pacific Coast Highway). The site investigation shall include sampling of soils and groundwater and shall evaluate whether residual total petroleum hydrocarbons or fuel-related constituents are present, given the proximity of past cases associated with leaking underground storage tanks to these sites.

A Phase I Environmental Site Investigation is also recommended for the former Trabucas Cleaners site (30765 Pacific Coast Highway) to further determine if there are any potential sources of tetrachloroethylene that may have impacts on the project area. Although the site was shown on record as “No violation found,” this site is a

potential source of tetrachloroethylene due to its operation as a dry cleaning business, and will be investigated further to determine any potential impacts to the project area.

A Phase I Environmental Site Investigation is also recommended for the Los Angeles County Department of Public Works Trancas Plant site (6338 Paseo Canyon Drive) to further determine if any residue of contaminants is present that could potentially impact the project area through exposure. Although this site's case was closed in February 2003, due to the site's close proximity to the project area, an investigation is necessary to assess the nature and extent of remaining contamination, if any.

Following the review of records discussed in the Initial Site Assessment, a Phase I Environmental Site Investigation is recommended for all four sites discussed above to identify any impacts from past land uses on the soil and/or groundwater beneath and adjacent to the proposed project site. Recommendations for remediation, handling, management, and disposal of impacted media can be found in the Avoidance, Minimization, and/or Mitigation Measures subsection.

2.10.4 Avoidance, Minimization, and/or Mitigation Measures

2.10.4.1 Existing Yellow and White Traffic Stripe and Pavement Markings

HW-1 A project-specific Lead Compliance Plan and Debris Containment and Disposal Work Plan will be prepared to address the removal, containment, storage, sampling, transport, and disposal of yellow thermoplastic and lead-based painted traffic stripe and/or pavement markings, and to prevent or minimize worker exposure to lead while handling the debris/residue (California Code of Regulations [CCR], Title 8, Section 1532.1, "Lead," and California Occupational Safety and Health Administration [Cal/OSHA] Construction Safety Order).

2.10.4.2 Aerially Deposited Lead Contaminated Soil

During construction, excess ADL soils require special handling and waste management, especially when disturbed during earthmoving activities.

HW-2 The California Department of Transportation (Caltrans) Office of Environmental Engineering will initiate a project-specific aerially deposited lead (ADL) site investigation to evaluate whether the excess ADL spoils generated can be reused on the project site and/or along the project corridor by adhering to the requirements of the Soil Management Agreement for Aerially Deposited Lead-Contaminated

Soils (ADL Agreement) that the Department entered into with the California Department of Toxic Substances Control (July 2016). If the excess ADL soils cannot be reused on the project site and/or along the project corridor, the site investigation will also determine whether they are classified as federal or state hazardous waste that requires off-site disposal at a permitted Class I California hazardous waste disposal facility or can be relinquished to the contractor with or without restrictions on land use.

HW-3 The site investigation data will be used to prepare a Lead Compliance Plan as required under CCR Title 8, Section 1532.1, “Lead,” and the Cal/OSHA Construction Safety Order.

HW-4 An Excavation and Transportation Plan will be prepared to establish the procedures that will be used to comply with requirements for excavating, stockpiling, transporting, and placing or disposing of material containing ADL.

2.10.4.3 Treated Wood Waste

HW-5 Removal and disposal of metal beam guardrail wood posts shall be managed under CCR Title 22, Division 4.5, Chapter 34, which specifies guidelines for storage, accumulation, shipment/transport, and disposal of treated wood waste at specific landfills.

2.10.4.4 Asbestos-Containing Materials and Lead-Based Paint

HW-6 Surveying and sampling will be required to determine procedures for the proper removal, handling, and disposal of asbestos-containing materials (ACM) and lead-based paint (LBP) during construction. Upon completion and analyses of surveys and sampling, an Asbestos Compliance Plan, Asbestos Removal Work Plan, and Lead-Based Paint Compliance Plan, and Lead-Based Paint Removal Work Plan shall be completed and signed by a Certified Industrial Hygienist that outlines potential risks and appropriate monitoring plans, as well as safety measures, to reduce the risk of worker exposure to contamination.

HW-7 A Dust Control Plan will be prepared and approved by the South Coast Air Quality Management District (SCAQMD) before commencing any work in areas containing ACM. The Dust Control Plan will outline

procedures to prevent dust emission during excavation, stockpiling, transportation, or placement of materials containing ACM.

HW-8 Removal and management of LBP during bridge demolition will be addressed in a project-specific Lead Compliance Plan.

2.10.4.5 Groundwater

HW-9 Groundwater testing will be required during the final design phase to determine the extent of potential contamination in groundwater that will be encountered during construction, and to confirm whether contamination, if any, can be attributed to nearby sources and impacts from previous releases.

2.10.4.6 Remediation of Parcels Associated with the Proposed Project

HW-10 Additional site investigation work is required to include sampling to evaluate any residual concentrations of contamination that may be present on each site and within Caltrans right-of-way. The results of the additional site investigations will be used to prepare the appropriate remediation cost estimates to manage, handle, and dispose of any impacted soils during construction and following construction, should long-term monitoring or remedial actions be required.

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2.11 Air Quality

This section addresses the potential impacts to air quality associated with the implementation of the proposed project, the regulatory framework, and compliance.

2.11.1 Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality, while the California Clean Air Act is its companion State law. These laws, and related regulations by the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS).

NAAQS and California Ambient Air Quality Standards (CAAQS) have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), ozone (O₃), and particulate matter (PM), which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM₁₀) and particles of 2.5 micrometers and smaller (PM_{2.5}). In addition, national and State standards exist for lead and State standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H₂S), and vinyl chloride. The NAAQS and the State standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Both State and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under NEPA. In addition to this environmental analysis, a parallel “Conformity” requirement under the FCAA also applies.

2.11.1.1 Conformity

The conformity requirement is based on FCAA Section 176(c), which prohibits the USDOT and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to the State Implementation Plan (SIP) for attaining the NAAQS. “Transportation Conformity” applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and “maintenance” (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. USEPA regulations at 40 CFR 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for State standards, regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for CO, NO₂, O₃, PM₁₀, and PM_{2.5}, and in some areas (although not in California) SO₂. California has attainment or maintenance areas for all of these transportation-related “criteria pollutants” except SO₂, and also has a nonattainment area for lead; however, lead is not currently required by the FCAA to be covered in transportation conformity analyses. Regional conformity is based on the emission analyses of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years for the RTP and 4 years for the FTIP. RTP and FTIP conformity uses travel demand and emission models to determine whether the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization, the FHWA, and the Federal Transit Administration (FTA) will make determinations that the RTP and the FTIP are in conformity with the SIP for achieving the FCAA goals. Otherwise, the projects in the RTP and/or the FTIP must be modified until conformity is attained. If the design concept, scope, and “open-to-traffic” schedule of a proposed transportation project are the same as described in the RTP and the FTIP, then the proposed project meets regional conformity requirements for the purposes of project-level analysis.

Project-level conformity analysis includes verification that the project is included in the regional conformity analysis and a “hot-spot” analysis if an area is in “nonattainment” or “maintenance” for CO and/or PM₁₀ or PM_{2.5}. A region is in “nonattainment” if one or more of the monitoring stations in the region measures a violation of the relevant standard and the USEPA officially designates the area as nonattainment. Areas that were previously designated as nonattainment areas but subsequently meet the standard may be officially re-designated to attainment by the USEPA and are then called “maintenance” areas. “Hot-spot” analysis is essentially the same, for technical purposes, as CO or PM analysis performed for NEPA purposes. Conformity does include some specific procedural and documentation standards for projects that require a hot-spot analysis. In general, projects must not

cause the “hot-spot” related standard to be violated, and must not cause any increase in the number and severity of violations in nonattainment areas. If a known CO or PM violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

2.11.2 Affected Environment (Regional Meteorology/Climatology)

Caltrans prepared the Air Quality Analysis Report for the Trancas Creek Bridge Replacement project in September 2016.

Ambient air quality is affected by climatological conditions, topography, and the types and amounts of pollutants emitted. The following discussion describes the relevant characteristics of the South Coast Air Basin (Basin) and offers an overview of the conditions that affect ambient air concentrations of pollutants. The Air Quality Study provides a detailed description of the ambient pollutants for which there are standards, as well as mobile-source air toxics (MSATs)/toxic air contaminants and naturally occurring asbestos.

The City of Malibu is located on the coastal slopes of the Santa Monica Mountains and is bounded by the Pacific Ocean to the south. Malibu’s climate is classified as Mediterranean with dry hot summers and relatively cool moist winters. Skies are mostly clear from the midsummer months through autumn. Like many coastal communities, heavy cloud cover and fog occur primarily during the spring and early summer months when stratus clouds associated with the marine layer move in from the west. Malibu summers are generally cooler, with high temperatures averaging in the upper 60s to the low 70s (degrees Fahrenheit), while its winter high temperatures average from the upper 50s to the low 60s (degrees Fahrenheit). December and January are typically the coldest months in this area of the Basin.

Malibu is located in the Los Angeles Basin, a coastal plain with connecting broad valleys and low hills that covers an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, as well as the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the Basin. The Basin’s severe air pollution problem is a consequence of the combination of emissions from the nation’s second-largest urban area, mountainous terrain surrounding the Basin that traps pollutants as they are pushed inland with the sea breeze, and meteorological

conditions that are adverse to the dispersion of those emissions. The average wind speed for Los Angeles is the lowest of the nation's 10 largest urban areas. In addition, the summertime daily maximum mixing heights (an index of how well pollutants can be dispersed vertically in the atmosphere) in Southern California are the lowest, on average, in the United States, due to strong temperature inversions in the lower atmosphere that effectively trap pollutants near the surface. The Southern California area is also an area with abundant sunshine, which drives the photochemical reactions that form pollutants (e.g., O₃ and a significant portion of PM_{2.5}).

In the Basin, high concentrations of O₃ are normally recorded during the late spring and summer months, when more intense sunlight drives enhanced photochemical reactions. In contrast, higher concentrations of CO are generally recorded in late fall and winter, when nighttime radiation inversions trap the emissions at the surface. High Inhalable Particulate Matter (PM₁₀) and PM_{2.5} concentrations can occur throughout the year, but occur most frequently in fall and winter in the Basin. Although there are changes in emissions by season, the observed variations in pollutant concentrations are largely a result of seasonal differences in weather conditions.

Almost all rainfall in Los Angeles County falls during the winter/early spring (November through April). Summer rainfall is normally restricted to scattered thundershowers in lower elevations and somewhat heavier activity in the mountains. The Santa Monica Pier Monitoring Station (No. 047953), which is located approximately 20 miles east of the project site, monitors rainfall levels. Average monthly rainfall measured at this station varies from 0.05 centimeter (cm) (0.02 inch) in July to 0.84 cm (0.33 inch) in October, 3.45 cm (1.36 inches) in November, 5.20 cm (2.04 inches) in December, and 7.60 cm (3.01 inches) in February with an average annual total of 32.00 cm (12.62 inches).

2.11.2.1 Existing Air Quality Condition

Existing air quality conditions in the project area can be characterized according to the CAAQS and NAAQS for the various pollutants and data collected in the region. Monitored data concentrations are typically expressed in terms of ppm or micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). A summary of the most recent 3 years of ambient air monitoring data at the Los Angeles International Airport (LAX) Monitoring Station (ARB No. 70111) and the South Long Beach Monitoring Station (ARB No. 70110) for criteria pollutants is provided in Table 2.15.

Table 2.15 Three-Year Ambient Air Monitoring Data (LAX and South Long Beach Monitoring Stations)

Pollutant/Standard		2013	2014	2015
Ozone (O₃)				
O ₃ (1-hour)				
	Maximum Concentration (ppm)	0.105	0.114	0.073
	Days > CAAQS (0.09 ppm)	1	1	0
O ₃ (8-hour)				
	Maximum Concentration (ppm)	0.081	0.08	0.063
	Days > CAAQS (0.070 ppm)	1	6	0
	Days > NAAQS (0.075 ppm)	1	3	0
Particulate Matter (PM₁₀)				
PM ₁₀ (24-hour)				
	Maximum Concentration (µg/m ³)	38	46	31
	Days > CAAQS (50 µg/m ³)	0	0	0
	Days > NAAQS (150 µg/m ³)	0	0	0
PM ₁₀ (Annual Average)				
	National Annual Average	20.8	22.1	- ¹
Particulate Matter (PM_{2.5})				
PM _{2.5} (24-hour) ²				
	Maximum Concentration (µg/m ³)	42.9	52.2	48.3
	Days > NAAQS (35 µg/m ³)	1	2	- ¹
PM _{2.5} (Annual Average)				
	National Annual Average	10.9	- ¹	- ¹
Carbon Monoxide (CO)				
CO (1-hour)				
	Maximum Concentration (ppm)	3.1	2.7	1.6
	Days > CAAQS (20 ppm)	0	0	0
	Days > NAAQS (35 ppm)	0	0	0
CO (8-hour)				
	Maximum Concentration (ppm)	2.5	1.9	1.4
	Days > CAAQS (9 ppm)	0	0	0
	Days > NAAQS (9 ppm)	0	0	0
Nitrogen Dioxide (NO₂)				
NO ₂ (1-hour – State Standard)				
	Maximum Concentration (ppm)	0.077	0.087	0.087
	Days > CAAQS (0.18 ppm)	0	0	0
NO ₂ (1-hour – National Standard)				
	Maximum Concentration (ppb)	78	87	87
	Days > NAAQS (100 ppb)	0	0	0
Sulfur Dioxide (SO₂)				
SO ₂ (1-hour)				
	Maximum Concentration (ppm)	0.0095	0.015	0.015
	Days > CAAQS (0.25 ppm)	0	0	0
SO ₂ (24-hour)				
	Maximum Concentration (ppm)	0.0018	0.0025	0.0015
	Days > CAAQS (0.04 ppm)	0	0	0
	Days > NAAQS (0.14 ppm)	0	0	0
SO ₂ (Annual Average)				
	Annual Average	- ¹	- ¹	- ¹
	Days > NAAQS (0.03 ppm)	- ¹	- ¹	- ¹

Source: Air Quality Analysis - Trancas Creek Bridge Replacement Project (Caltrans, March 2017).

¹ Insufficient data available to determine the value.

² Data measured at South Long Beach monitoring station.

µg/m³ = micrograms per cubic meter

CAAQS = California Ambient Air Quality Standards

Caltrans = California Department of Transportation

LAX = Los Angeles International Airport

NAAQS = National Ambient Air Quality Standards

ppb = parts per billion

ppm = parts per million

The monitoring data for O₃, CO, PM₁₀, NO₂, and SO₂ data were obtained from the LAX Monitoring Station (ARB No. 70111) located at 7201 West Westchester Parkway in Los Angeles. This monitoring station is located approximately 0.8 mile west of SR-1 and about 24.5 miles east of the project site. The PM_{2.5} data were taken from the South Long Beach Monitoring Station (ARB No. 70110) located at 1305 East Pacific Coast Highway in Long Beach, which is located approximately 0.2 mile north of SR-1 and about 42 miles east of the project site. Figure 2-23 illustrates the proximity of monitoring stations to SR-1 and to the proposed project.

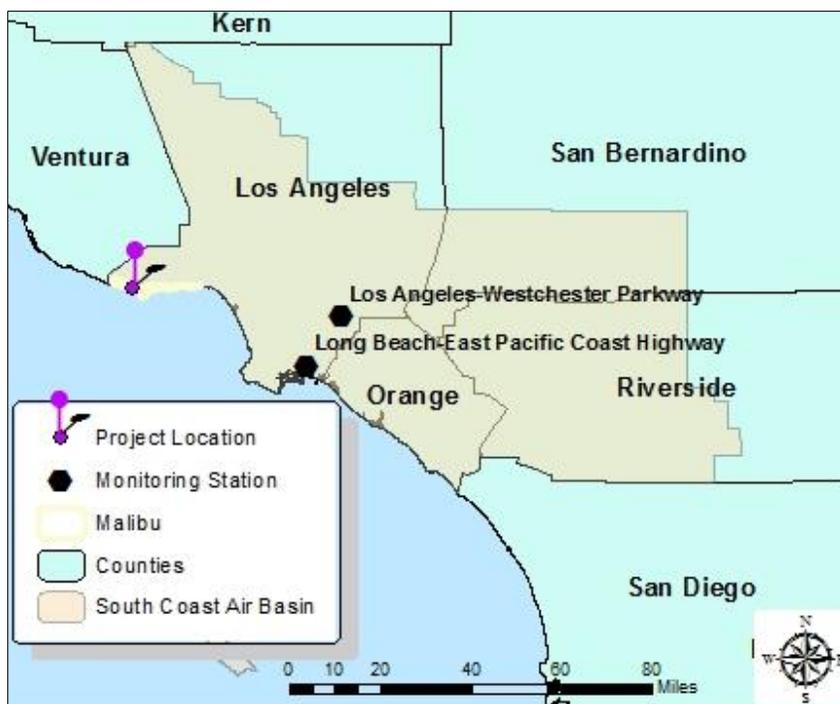


Figure 2-23 SR-1 Monitoring Station Proximity

The 2014 AADT along SR-1 at near the LAX Monitoring Station is 37,000 with 2.16 percent trucks. The AADT along SR-1 near the South Long Beach Monitoring Station, measured near the intersection with Lakewood Boulevard, is 16,500 with 2.10 percent trucks. The AADT at the SR-1/State Route 23 (SR-23) intersection near the project site is 12,300 with 5.43 percent trucks.

Based on the comparison of the traffic volumes, truck percentages, land uses, and proximity to a freeway, the ambient concentration data measured at the LAX and South Long Beach Monitoring Stations are deemed representative for comparison to the proposed project.

The prevailing daytime sea breeze tends to transport pollutants and precursor emissions from coastal areas into the Basin’s inland valleys, and from there, farther inland into neighboring areas of the Salton Sea Air Basin as well as the Mojave Desert Air Basin.

2.11.2.2 Attainment Status

The NAAQS developed and updated by the USEPA set thresholds for six major pollutants or criteria pollutants. The NAAQS are two tiered: primary, to protect public health, and secondary, to prevent degradation to the environment (i.e., impairment of visibility and damage to vegetation and property). The six criteria pollutants are O₃, PMs (PM₁₀ and PM_{2.5}), CO, NO₂, lead, and SO₂. The attainment status of each pollutant in the South Coast Air Basin is shown in Table 2.16. Each pollutant is discussed in greater detail below.

Table 2.16 Federal (NAAQS) and State (CAAQS) Attainment Status

Criteria Pollutant	NAAQS			CAAQS	
	Averaging Time	Designation (Classification)	Attainment Date	Averaging Time	Designation
2008 8-Hour Ozone	8-Hour (0.075 ppm)	Nonattainment (Extreme)	12/31/2032	0.070 ppm (137 µg/m ³)	Nonattainment
CO	1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)	1-Hour (20 ppm)	Attainment
	8-Hour (9 ppm)			8-Hour (9 ppm)	
PM ₁₀	24-Hour (150 µg/m ³)	Attainment (Maintenance)	N/A	24-Hour (50 µg/m ³)	Nonattainment
			N/A	Annual (20 µg/m ³)	Nonattainment
PM _{2.5}	24-Hour (35 µg/m ³)	Nonattainment	12/14/2014	No separate State standard	Nonattainment
	Annual (15.0 µg/m ³)	Nonattainment	4/15/2015	Annual (12.0 µg/m ³)	Nonattainment
NO ₂	1-Hour (100 ppb)	Attainment/Unclassified	N/A	0.18 ppm (339 µg/m ³)	Attainment
	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998	0.030 ppm (57 µg/m ³)	Attainment
SO ₂	1-Hour (75 ppb)	Designations Pending	N/A	0.25 ppm	Attainment
	24-Hour (0.014 ppm)	Attainment/Unclassified	N/A	0.04 ppm (105 µg/m ³)	Attainment
	Annual (0.03 ppm)				
Lead (Pb)	3 Months Rolling (0.15 µg/m ³)	Nonattainment (Partial-LA portion)	12/31/2015	30-day concentration (1.5 µg/m ³)	Attainment

Source: Air Quality Analysis – Trancas Creek Bridge Replacement Project (Caltrans, March 2017).

µg/m³ = micrograms per cubic meter
 CAAQS = California Ambient Air Quality Standards
 Caltrans = California Department of Transportation
 CO = carbon monoxide
 N/A = not applicable
 NAAQS = National Ambient Air Quality Standards

NO₂ = nitrogen dioxide
 PM₁₀ = particulate matter less than 10 microns in size
 PM_{2.5} = particulate matter less than 2.5 microns in size
 ppb = parts per billion
 ppm = parts per million
 SO₂ = sulfur dioxide

Ozone

O₃ is a toxic gas that irritates the lungs and damages materials and vegetation. O₃ is a secondary pollutant; it is not directly emitted. O₃ is a principal cause of lung and eye irritation in an urban environment and is formed in the atmosphere through a series of chemical reactions involving hydrocarbons and nitrogen oxides (NO_x) in the presence of sunlight.

Particulate Matter

PM includes both aerosols and solid particles of a wide range of size and composition. Of particular concern are those particles with a diameter between 10 and 2.5 microns (PM₁₀) and smaller than or equal to 2.5 microns (PM_{2.5}). The PM₁₀ criteria are aimed primarily at what the USEPA refers to as “coarse particles.” Coarse particles are often found near roadways, dusty industries, construction sites, and fires. The PM_{2.5} criteria are referred to as “fine particles.” These fine particles can be directly emitted and can also be formed when gases from power plants, industries, and automobiles react in the air. The principal health effect of airborne PM is on the respiratory system. Studies have linked particulate pollution with irritation of the airways, coughing, aggravated asthma, irregular heartbeat, and premature death in people with heart or lung disease.

Carbon Monoxide

CO is a colorless and odorless gas, which, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can lead to headaches, aggravation of cardiovascular disease, and impairment of central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations are typically found near crowded intersections, along heavily used roadways carrying slow-moving traffic, and at or near ground level. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within a relatively short distance (300 to 600 feet) of heavily traveled roadways. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973.

Nitrogen Oxides

NO_x from automotive sources are some of the precursors in the formation of O₃ and secondary PM. O₃ and PM are formed through a series of photochemical reactions in

the atmosphere. Because the reactions are slow and occur as the pollutants are diffusing downwind, elevated O₃ levels are often found many miles from the source of the precursor emissions. The effects of NO_x emissions are examined on a regional basis.

Lead

Lead is a stable compound that persists and accumulates both in the environment and in animals. In humans, it affects the blood-forming (hematopoietic), nervous, and renal systems. In addition, lead has been shown to affect the normal functions of the reproductive, endocrine, hepatic, cardiovascular, immunological, and gastrointestinal systems, although there is significant individual variability in response to lead exposure. Since 1975, lead emissions have been in decline due in part to the introduction of catalyst-equipped vehicles, and the decline in production of leaded gasoline. In general, an analysis of lead is limited to projects that emit significant quantities of the pollutant (i.e., lead smelters) and are not applied to transportation projects.

Sulfur Oxides

Sulfur oxides (SO_x) constitute a class of compounds of which SO₂ and sulfur trioxide (SO₃) are of greatest importance. The oxides are formed during the combustion of the sulfur components in motor fuels. Relatively few SO_x are emitted from motor vehicles because motor fuels are now de-sulfured. The health effects of SO_x include respiratory illness, damage to the respiratory tract, and bronchia constriction.

Table 2.17 provides a summary of the latest applicable CAAQS and NAAQS for the six criteria pollutants as well as other pollutants of concern. Table 2.18 shows the health effects associated with each pollutant.

Table 2.16 provides the attainment status for the Basin in which the proposed project is located. The attainment status is based on designations promulgated by the USEPA.

2.11.2.3 Sensitive Receptors

SCAQMD defines a sensitive receptor as a person in the population who is particularly susceptible to health problems resulting from exposure to air pollutants (e.g., persons at schools, playgrounds, childcare centers, long-term health care facilities, rehabilitation centers, convalescent centers, hospitals, retirement homes, or residences) (SCAQMD 2005a). Residential areas are considered sensitive to air pollution because residents, including children and the elderly, tend to be at home for extended periods of time, resulting in sustained exposure to pollutants.

Table 2.17 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1-Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24-Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24-Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8-Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8-Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1-Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1-Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3-Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24-Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—	
Lead ^{12,13}	30-Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High-Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3- Month Average	—		0.15 µg/m ³		
Visibility- Reducing Particles ¹⁴	8-Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24-Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24-Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

Source: Ambient Air Quality Standards (ARB 2016). Website: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>.

Footnotes are provided on the following page.

- ¹ California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility-reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- ² National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
- ³ Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ⁴ Any equivalent procedure method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- ⁵ National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- ⁶ National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ⁷ Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
- ⁸ On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- ⁹ On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- ¹⁰ To attain the 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ¹¹ On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- ¹² The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- ¹³ The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standards are approved.
- ¹⁴ In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basins, respectively.

°C = degrees Celsius

ARB = California Air Resources Board

U.S. EPA = United States Environmental Protection Agency

µg/m³ = micrograms per cubic meter

mg/m³ = milligrams per cubic meter

ppm = parts per million

ppb = parts per billion

Table 2.18 Health Effects Summary for the Criteria Pollutants

Pollutant	Source	Primary Effects
Ozone (O ₃)	Atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight	Aggravation of respiratory diseases; irritation of eyes; impairment of pulmonary function; plant leaf injury
Nitrogen Dioxide (NO ₂)	Motor vehicle exhaust; high temperature; stationary combustion; atmospheric reactions	Aggravation of respiratory illness; reduced visibility; reduced plant growth; formation of acid rain
Carbon Monoxide (CO)	Incomplete combustion of fuels and other carbon-containing substances, such as motor vehicle exhaust; and natural events, such as decomposition of organic matter	Reduced tolerance for exercise; impairment of mental function; impairment of fetal development; impairment of learning ability; death at high levels of exposure; aggravation of some cardiovascular diseases (angina)
Particulate Matter (PM ₁₀ and PM _{2.5})	Fuel combustion in motor vehicles, equipment, and industrial sources; construction activities; industrial processes; residential and agricultural burning; atmospheric chemical reactions	Reduced lung function; aggravation of the effects of gaseous pollutants; aggravation of respiratory and cardiorespiratory diseases; increased cough and chest discomfort; reduced visibility
Sulfur Dioxide (SO ₂)	Combustion of sulfur-containing fossil fuels; smelting of sulfur-bearing metal ores; industrial processes	Aggravation of respiratory and cardiovascular diseases; reduced lung function; carcinogenesis; irritation of eyes; reduced visibility; plant injury; deterioration of materials (e.g., textiles, leather, finishes, coating)
Lead (Pb)	Contaminated soil	Impairment of blood function and nerve construction; behavioral and hearing problems in children

Source: Air Quality Analysis – Trancas Creek Bridge Replacement Project (Caltrans, March 2017).

The existing land uses surrounding the project site include a mix of open space, residential, and commercial uses. The sensitive residential receptors are located near the project site (to the northwest and northeast) (Figure 2-24). The closest schools and healthcare facilities are located farther away (Figure 2-25).

2.11.2.4 Construction Emissions

Construction is a source of fugitive dust and exhaust emissions that can have substantial temporary effects on local air quality (i.e., exceed State air quality standards for PM_{2.5} and PM₁₀). Such emissions would result from earthmoving and the use of heavy equipment as well as land clearing, ground excavation, cut-and-fill operations, and the construction of roadways. Dust emissions can vary substantially from day to day, depending on the level of activity, the specific operations, and the prevailing weather.

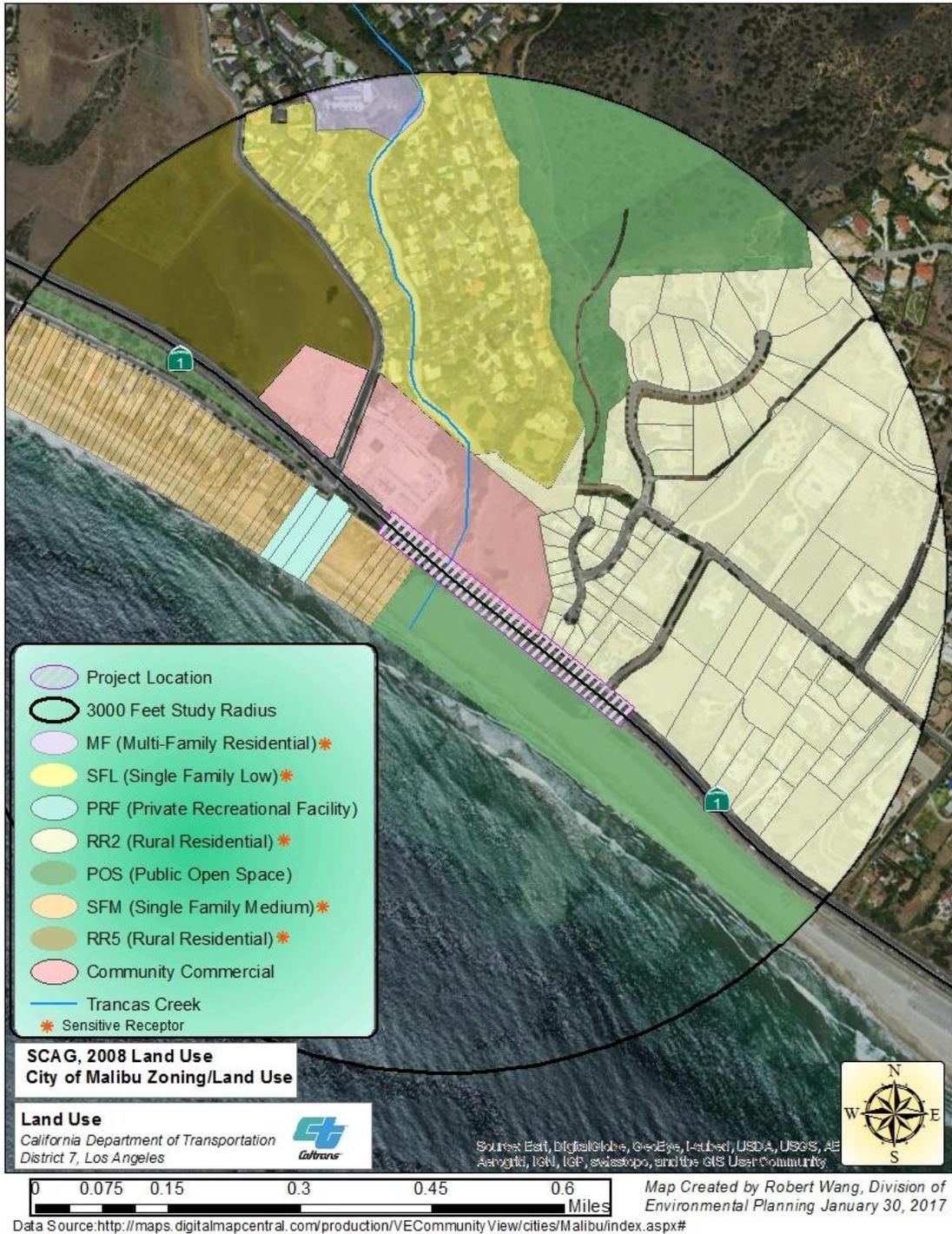


Figure 2-24 Sensitive Receptors – Residential Areas

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Figure 2-25 Sensitive Receptors – Schools and Healthcare Facilities

According to 40 CFR 93.123(c)(5), hot-spot analyses are not required to consider construction-related activities that cause temporary increases in emissions. Temporary increases in emissions are defined as those that occur only during the construction phase and that last 5 years or less at any individual site. The proposed project has construction durations of approximately 1 year. Emissions from the construction activities, therefore, are considered temporary pursuant to 40 CFR 93.123(c)(5), and a qualitative analysis was conducted.

2.11.3 Environmental Consequences

2.11.3.1 No Build Alternative – Alternative 1

Alternative 1 would not result in the construction of any of the proposed project improvements. Therefore, there would be neither temporary, construction-related impacts nor operational impacts to air quality.

2.11.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Construction Impacts

During construction, temporary degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction

equipment also are anticipated and would include CO, NO_x, volatile organic compounds (VOCs), directly emitted particulate matter (PM₁₀ and PM_{2.5}), and toxic air contaminants (e.g., diesel exhaust PM). O₃ is a regional pollutant derived from NO_x and VOCs in the presence of sunlight and heat. Construction activities associated with the Alternatives 2 and 3 would be temporary and would not require more than 5 years to complete; therefore, construction emissions are not considered for conformity purposes.

Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM₁₀ emissions would vary from day to day depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the USEPA to add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the emissions can be reduced by up to 50 percent. Caltrans Standard Specifications (Section 14-9.02) pertaining to dust minimization requires the use of water or dust palliative compounds and will reduce potential fugitive dust emissions during construction. The proposed project is located in the South Coast Air Basin and is required to comply with the respective SCAQMD Fugitive Dust Rule to minimize emissions of fugitive dust during construction activities.

In addition to fugitive dust emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs, and some soot particulate (PM₁₀ and PM_{2.5}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site. In order to minimize the temporary exhaust emissions from the heavy-duty trucks and construction equipment adjacent to certain sensitive receptors, certain construction activities (e.g., extended idling, material storage, and equipment maintenance) would be limited as much as possible.

SO₂ is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off-road diesel fuel meeting federal standards can contain 300 ppm or more of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur. However, under California law and ARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 ppm); thus, SO₂-related issues due to diesel exhaust will be minimal. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site(s). Such odors would be quickly dispersed below detectable levels as distance from the site(s) increases.

Construction emissions for the proposed project are estimated based on the engineer's estimate for construction activities using the Road Construction Model developed by the Sacramento Metropolitan Air Quality Management District. The emissions calculations are summarized in Tables 2.19 and 2.20.

Table 2.19 Summary of Construction Emissions for the Short Bridge Replacement (120 feet)

Construction Activity	ROG	CO	NO _x	PM ₁₀	PM _{2.5}	CO ₂
Grubbing/Clearing (lbs/day)	0.3	1.5	1.2	0.1	0.1	206.8
Grading/Excavation (lbs/day)	0.3	1.5	1.4	0.1	0.1	250.4
Drainage/Utilities/Sub-grade (lbs/day)	0.3	1.5	1.2	0.1	0.1	206.8
Paving (lbs/day)	0.3	1.4	1.2	0.1	0.1	206.6
Maximum (lbs/day)	0.3	1.5	1.4	0.1	0.1	250.4
Total (tons)	0.0	0.2	0.2	0.0	0.0	37.0

Source: Air Quality Analysis Report for the Trancas Bridge Replacement (Caltrans, September 2016).

CO = carbon monoxide

PM_{2.5} = particulate matter less than 2.5 microns in size

CO₂ = carbon dioxide

PM₁₀ = particulate matter less than 10 microns in size

lbs/day = pounds per day

ROG = reactive organic gases

NO_x = nitrogen oxides

Table 2.20 Summary of Construction Emissions for the Long Bridge Replacement (240 feet)

Construction Activity	ROG	CO	NO _x	PM ₁₀	PM _{2.5}	CO ₂
Grubbing/Clearing (lbs/day)	0.3	1.5	1.2	0.1	0.1	206.5
Grading/Excavation (lbs/day)	0.3	1.5	1.9	0.1	0.1	355.0
Drainage/Utilities/Sub-grade (lbs/day)	0.3	1.5	1.2	0.1	0.1	206.8
Paving (lbs/day)	0.3	1.4	1.2	0.1	0.1	206.6
Maximum (lbs/day)	0.3	1.5	1.9	0.1	0.1	355.0
Total (tons)	0.0	0.2	0.2	0.0	0.0	43.9

Source: Air Quality Analysis Report for the Trancas Bridge Replacement (Caltrans, September 2016).

CO = carbon monoxide

PM_{2.5} = particulate matter less than 2.5 microns in size

CO₂ = carbon dioxide

PM₁₀ = particulate matter less than 10 microns in size

lbs/day = pounds per day

ROG = reactive organic gases

NO_x = nitrogen oxides

During construction, contractors are required to comply with the requirements of all applicable State and local regulations, including, but not limited to, SCAQMD Rules 401 (Visible Emissions), 402, (Nuisance), and 403 (Fugitive Dust).

During project construction, objectionable odors would be mainly related to operation of diesel-powered equipment and off-gas emissions during road-building activities (e.g., paving and asphaltting). SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOC emissions from paving, asphalt, concrete curing, and cement coatings operations. The construction of the proposed project shall comply with all applicable SCAQMD rules. While construction equipment on site would generate some objectionable odors, primarily arising from diesel exhaust, these emissions would generally be limited to the project site and would be temporary in nature. Objectionable odors should also be minimized by conducting certain construction activities in areas at least 500 feet from the sensitive receptors, as feasible.

Operational Impacts

Long-Term (Operational) Emissions

Regional Transportation Conformity Requirements

The currently approved regional plan and program are the 2016 RTP/Sustainable Communities Strategy (SCS) and the 2015 FTIP. SCAG adopted the 2016 RTP/SCS on April 7, 2016. The FHWA and the FTA approved the 2016 RTP/SCS on June 1, 2016. The 2015 FTIP was adopted by SCAG on September 11, 2014, and was federally approved on December 15, 2015. The most recent Amendment to the 2015 FTIP is No. 15-12, which was approved by the FHWA and the FTA on June 2, 2016.

Based on the proposed project scope of work, this project is considered exempt from conformity requirements pursuant to 40 CFR 40 93.126. Therefore, this project is deemed exempt from regional conformity requirements.

Project-Level Conformity – Carbon Monoxide

The local analysis is commonly referred to as a project-level hot-spot analysis. Conformity must be demonstrated at the project level for CO, PM₁₀, and PM_{2.5} nonattainment and maintenance areas. As discussed previously, a region is a nonattainment area if one or more monitoring stations in the region fail to attain the relevant CAAQS or NAAQS. In general, projects must not cause the standards to be violated, and in nonattainment areas, the project must not cause any increase in the number and severity of violations. The proposed project is in an attainment-

maintenance area with respect to the federal CO standard (Table 2.16).

Consequently, the effects of localized CO hot-spot emissions were evaluated using the Transportation Project-Level Carbon Monoxide Protocol (CO Protocol), which was developed for Caltrans by the Institute of Transportation Studies at the University of California, Davis (Garza et al. 1997). The CO Protocol provides a qualitative step-by-step procedure to determine whether project-related CO concentrations have the potential to generate new air quality violations, worsen existing violations, or delay attainment of the CAAQS or NAAQS for CO, and whether a quantitative or qualitative analysis would be required based on the response to a list of screened questions. After reviewing the CO Protocol, it was determined that this project is exempt from all emissions analysis.

Particulate Matter Analysis

The proposed project is located in Los Angeles County in the South Coast Air Basin, which is an attainment-maintenance area (effective July 26, 2013) for PM₁₀ but is nonattainment for PM_{2.5}. Therefore, pursuant to 40 CFR 93, a hot-spot analysis would normally be required for conformity purposes. However, this project is classified as exempt from conformity requirements per 40 CFR 93.126, and this is a type of project that does not anticipate involving a significant number of, or resulting in an increase in, the number of diesel vehicles. An increase in vehicle idling is also not anticipated. The proposed project is expected to have a neutral influence on PM₁₀ and PM_{2.5} emissions and thus is not anticipated to be of air quality concern for PM₁₀ and PM_{2.5}. The proposed project is unlikely to result in adverse impacts to ambient PM₁₀ and PM_{2.5}.

Mobile-Source Air Toxics (MSAT) Analysis

Controlling air toxic emissions became a national priority with the passage of the federal Clean Air Act Amendments of 1990 (CAAA), whereby Congress mandated that the USEPA regulate 188 air toxics, also known as hazardous air pollutants. The USEPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007), and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (<https://www.epa.gov/iris>). In addition, the USEPA identified nine compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 2011 National Air Toxics Assessment (NATA) (<https://www.epa.gov/nationa-air-toxics-assessment>). These are 1,3-butadiene, acetaldehyde, acrolein, benzene, diesel particulate matter (diesel PM)

ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future USEPA rules.

Incomplete or Unavailable Information for Project-Specific MSAT Impacts Analysis

In the FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The USEPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. The USEPA is the lead authority for administering the FCAA and its amendments and has specific statutory obligations with respect to hazardous air pollutants and MSAT. The USEPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. The USEPA maintains the IRIS, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects."¹ Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are: cancer in humans in occupational settings, cancer in animals, and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the

¹ USEPA. Integrated Risk Information System. Website: <https://www.epa.gov/iris/>, accessed January 2017.

adverse human health effects of MSAT compounds at current environmental concentrations¹ or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling, dispersion modeling, exposure modeling, and then final determination of health impacts—each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70-year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways, to determine the portion of time that people are actually exposed at a specific location, and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, which is a concern expressed by the HEI.² As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and for diesel PM in particular. The USEPA states that with respect to diesel engine exhaust, “the absence of adequate data to develop a sufficiently confident dose-response relationship from the epidemiologic studies has prevented the estimation of inhalation carcinogenic risk (<https://www.epa.gov/iris>).”

¹ HEI, Special Report 16, <http://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>, accessed January 2017.

² Health Effects Institute. Special Report 16, <http://www.healtheffects.org/publication/mobile-source-air-toxics-critical-review-literature-exposure-and-health-effects>, accessed January 2017.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the USEPA as provided by the federal Clean Air Act (CAA) to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards (e.g., benzene emissions from refineries). The decision framework is a two-step process. The first step requires the USEPA to determine an “acceptable” level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld the USEPA’s approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than deemed acceptable¹.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision-makers, who would need to weigh this information against project benefits (e.g., reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response) that are better suited for quantitative analysis.

Tiered Approach for Mobile-Source Air Toxic Impacts Analysis

Due to the emerging state of the MSAT-related science and techniques, no criteria have been established for determining the relative significance of air toxics

¹ Natural Resources Defense Council an Louisiana Environmental Action Network v. US EPA and American Chemistry Council. Website: [https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/\\$file/07-1053-1120274.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/284E23FFE079CD59852578000050C9DA/$file/07-1053-1120274.pdf), accessed January 2017.

emissions. However, the FHWA, in its updated Interim Guidance published in December 2012, recommends a range of options deemed appropriate for addressing and documenting the MSAT issue in NEPA documents, as described below.

- **No Analysis:** Required for projects with no potential for meaningful MSAT effects—applicable for categorically excluded projects under 23 CFR 771.117(c); exempt projects under 40 CFR 93.126; or projects with no meaningful impacts on traffic volumes or vehicle mix.
- **Qualitative Analysis:** Required for projects with low potential MSAT effects—projects that serve to improve the operations of highway, transit, or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase emissions.
- **Quantitative Analysis:** For projects that have the potential for meaningful differences in MSAT emissions among project alternatives. In order to fall into this category, a project should:
 - Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel PM in a single location, involving a significant number of diesel vehicles for new projects, or accommodating with a significant increase in the number of diesel vehicles for expansion projects;
 - Create new capacity or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000 or greater by the design year; and
 - Be proposed to be located in proximity to populated areas.

The project scope proposes to address the existing condition of the bridge. Based on a review of the proposed scope, traffic data, and settings, this project is anticipated to have low potential for MSAT effects. In accordance with the FHWA Interim Guidance, the project therefore requires a qualitative analysis.

Project Analysis

The purpose of this project is to improve the condition of the existing bridge structure by replacing the existing bridge with a new bridge. This project has been determined to generate minimal air quality impacts for the FCAA Amendments of 1990 criteria pollutants and has not been linked to any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project

location, or any other factor that would cause an increase in the MSAT impacts of the project from those of the no build alternative.

Moreover, the USEPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with the USEPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent.¹ This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

2.11.4 Climate Change

Climate change is analyzed in Section 2.21, Climate Change Under CEQA. Neither the USEPA nor the FHWA has promulgated explicit guidance or methodology for conducting project-level greenhouse gas analysis. As stated on the FHWA's sustainability website (<https://www.fhwa.dot.gov/environment/sustainability/>), climate change considerations in regards to infrastructure resilience should be integrated throughout the transportation decision-making process, from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will facilitate decision-making and improve efficiency at the program level and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be easily integrated into many planning factors (e.g., supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life).

Because additional requirements pertaining to climate change have been set forth in California legislation and executive orders, the issue is addressed in this environmental document and may be used to inform the NEPA decision. The four strategies set forth by the FHWA to lessen climate change impacts correlate with efforts the State has undertaken and is undertaking to deal with transportation and climate change; the strategies are related to improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in the growth of vehicle miles traveled.

¹ Federal Highway Administration. October 12, 2016. Updated Interim Guidance on MSAT Analysis in NEPA Documents.

2.11.4.1 Naturally Occurring Asbestos

Naturally occurring asbestos is a fibrous material found in certain types of rock formations. Naturally occurring asbestos is the result of natural geologic processes and is commonly found near earthquake faults in California. Asbestos becomes a human health hazard when it becomes airborne; it is classified as a known human carcinogen by State, federal, and international agencies and was identified as a toxic air disease and cancer.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released into the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos-bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. Serpentinite may contain chrysotile asbestos, especially near fault zones. Ultramafic rock, a rock closely related to serpentinite, may also contain asbestos minerals.

Asbestos can also be associated with other rock types in California, though much less frequently than serpentinite and/or ultramafic rock. The California Department of Conservation, Division of Mines and Geology, has developed a map of the State that shows the general location of ultramafic rock in the State. Los Angeles County is one of the counties identified as containing serpentinite and ultramafic rock. However, only the Catalina Island portion of Los Angeles County has been found to contain such rock; hence, it is not anticipated to be found in the project area. Therefore, no potential impacts from naturally occurring asbestos during project construction would occur.

2.11.5 Avoidance, Minimization, and/or Mitigation Measures

Most of the construction impacts to air quality are short term in duration and therefore will not result in long-term adverse conditions. Implementation of the following measures, some of which may be required for other purposes (e.g., storm water pollution control or as part of other applicable rules including SCAQMD Rule 403), will likely reduce any temporary air quality impacts resulting from construction activities:

- AQ-1** The construction contractor shall comply with the Caltrans Standard Specifications in Section 14 (2010).
- Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including South Coast Air Quality Management District (SCAQMD) rules and regulations and local ordinances.
 - Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.
- AQ-2** Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a “no visible dust” criterion either at the point of emission or at the right-of-way line as required by SCAQMD.
- AQ-3** Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas.
- AQ-4** Wash trucks as they leave the project site as necessary to control fugitive dust emissions.
- AQ-5** Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.
- AQ-6** Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- AQ-7** Locate equipment and materials storage sites at least 500 feet from the sensitive receptors.
- AQ-8** Keep construction areas clean and orderly.
- AQ-9** Establish environmentally sensitive areas or their equivalent at least 500 feet away from sensitive air receptors within which construction activities (e.g., extended idling, material storage, and equipment maintenance) would be prohibited, to the extent feasible.

- AQ-10** Use track-out reduction measures (e.g., gravel pads) at project access points to minimize dust and mud deposits on roads affected by construction traffic.
- AQ-11** Cover all transported loads of soils and wet materials prior to transport or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (PM) during transportation.
- AQ-12** Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease PM.
- AQ-13** Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.
- AQ-14** Install mulch or plant vegetation as soon as is practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement (e.g., straw blowing) may themselves cause dust and visible emission issues, and may need to use controls (e.g., dampened straw).

2.11.5.1 Minimization of PM₁₀ During Construction

As noted above, the Caltrans Standard Specifications specifically require compliance with all applicable laws and regulations related to air quality, which includes applicable rules and regulations of the respective Air Quality Management District (e.g., Rules 401, 402, and 403).

SCAQMD Rule 403 requires that fugitive dust be controlled with the best available control measures in order to reduce dust so that it does not remain visible in the atmosphere beyond the property line of the proposed project. SCAQMD Rule 403 also requires a dust control plan to be submitted and approved prior to construction. The dust control plan should describe all applicable dust control measures that would be implemented at the project site; and should describe types of dust suppressant, surface treatments, and other measures to be used at the construction sites to comply with Rule 403.

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2.12 Noise

This section evaluates the potential noise impacts on nearby noise-sensitive receptors resulting from the proposed project. For federally funded highway transportation projects, traffic noise must be considered for projects that would result in an increase in traffic or bring traffic closer to sensitive receptors. The proposed project does not involve either; therefore, the traffic noise discussion will be limited to the existing environment and to construction noise.

2.12.1 Regulatory Setting

CEQA and NEPA provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between CEQA and NEPA.

2.12.1.1 California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The CEQA noise analysis is included at the end of this section.

2.12.1.2 National Environmental Policy Act and 23 CFR 772

For highway transportation projects with FHWA (and Caltrans, as assigned) involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 A-weighted decibels [dBA]) is lower than the NAC for commercial areas (72 dBA). Table 2.21 lists the NAC for use in the NEPA 23 CFR 772 analysis.

Table 2.21 Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, $L_{eq}(h)$	Description of activity category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B ¹	67 (Exterior)	Residential.
C ¹	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.

Source: Caltrans Standard Environmental Reference, IS/EA Guidance.

¹ Includes undeveloped lands permitted for this activity category.

NAC = noise abatement criteria

$L_{eq}(h)$ = equivalent noise level measured for a 1-hour period

2.12.1.3 City of Malibu Noise Ordinance (Municipal Code)

The City Noise Ordinance states under Section 8.24.050, Prohibited Acts:

Notwithstanding any other provisions of this chapter, the following acts and the causing or permitting thereof, are declared to be in violation of this chapter:

G. Construction: Operating or causing the operation of any tools, equipment, impact devices, derricks, or hoists used in construction, chilling, repair, alteration, demolition, or earthwork on weekdays between the hours of 7 p.m. and 7 a.m., before 8 a.m. or after 5 p.m. on Saturday, or at any time on Sundays or holidays, except as provided in Section 8.24.060(D).

Section 8.24.060, Exemptions, states which acts are exempt from the Noise Ordinance:

D. Construction—Special Circumstances. The provisions of Section 8.24.050 do not apply to any person who performs construction, repair, excavation or earthmoving work pursuant to the expressed written permission of the city manager to perform such work at times prohibited in Section 8.24.050. The applicant must submit to the city manager an application in writing, stating the reasons for the request and the facts upon which such reasons are based. The city manager may grant written permission for the construction if he or she finds that:

- 1. The work proposed to be done is in the public interest.*
- 2. Hardship, injustice, or unreasonable delay would result from the interruption thereof during the hours and days specified in Section 8.24.050, or*
- 3. The building or structure involved is devoted or intended to be devoted to a use immediately incident to public defense.*

2.12.1.4 City of Malibu Noise Element

The City General Plan Noise Element establishes standards for exterior sound levels based on land use categories. The Noise Element states that the maximum acceptable outdoor noise exposure level for residential areas is 75 dBA Community Noise Equivalent Level (CNEL) and for commercial and institutional areas during daytime hours is 85 dBA CNEL.

Table 2.22 summarizes the City's maximum exterior noise limits (City of Malibu, General Plan-Noise Element, 1995).

Figure 2-26 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Table 2.22 City of Malibu Maximum Exterior Noise Limits, Non-Transportation Sources

Receiving Land Use Category	General Plan Land Use Districts	Time Period	Noise Level (dBA)	
			L _{eq}	L _{max}
Rural	All RR Zones and PRF, CR, AH, OS	7 a.m. to 7 p.m.	55	75
		7 p.m. to 10 p.m.	50	65
		10 p.m. to 7 a.m.	40	55
Other Residential	All SFR, MFR, and MFBF Zones	7 a.m. to 7 p.m.	55	75
		7 p.m. to 10 p.m.	50	65
		10 p.m. to 7 a.m.	45	60
Commercial Institutional	CN, CC, CV, CG, and I Zones	7 a.m. to 7 p.m.	65	85
		7 p.m. to 7 a.m.	60	70

Source: City of Malibu General Plan, Noise Element, Chapter 6 (1995).

AH = Agriculture-Horticulture
 CC = Community Commercial
 CG = Commercial General
 CN = Commercial Neighborhood
 CR = Commercial Recreation
 CV = Commercial Visitor
 dBA = A-weighted decibel(s)
 I = Institutional

L_{eq} = equivalent continuous sound level
 L_{max} = maximum instantaneous noise level
 MFBF = Multifamily Beachfront
 MFR = Multifamily Residential
 OS = Open Space
 PRF = Private Recreational Facilities
 RR = Rural Residential
 SFR = Single-Family Residential

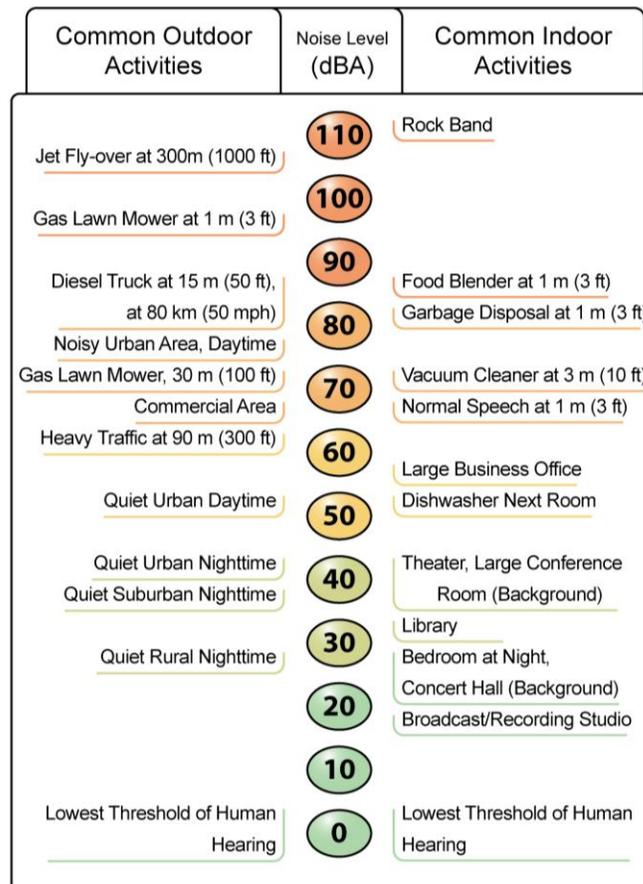


Figure 2-26 Noise Levels of Common Activities

2.12.2 Affected Environment

Caltrans prepared a Technical Noise Review Memorandum on September 3, 2015, for the Trancas Bridge Replacement Project. This technical review evaluated the proposed project pursuant to 23 CFR 772.7.

Under 23 CFR 772.7, projects are categorized as Type I, Type II, or Type III projects. The FHWA defines a Type I project as a proposed federal or federal-aid highway project for the construction of a highway in a new location, or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment, or increases the number of through-traffic lanes. The Technical Noise Review (2015) concluded that the proposed project is not classified as a Type I project based on 23 CFR 772.7 and the Caltrans 2011 Traffic Analysis Noise Protocol. Because this is not a Type I project, the following discussion will be limited to the existing noise environment.

2.12.2.1 Sound and Noise

Noise is often defined as unwanted sound that is typically associated with human activity and that interferes with normal activities. Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Sound and noise is a process that consists of three components:

- Sound Source
- Sound Path
- Sound Receiver

All three components must be present for sound to exist and sound must be received by a hearing organ (ear), sensor, or object that perceives or be affected by sound or noise. In most situations, there are many different sound sources, paths, and receivers, instead of just one of each.

Sound levels are measured and expressed in decibels. The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to low and high frequencies than to medium frequencies, which correspond with human speech. In response, the A-weighted noise level (or scale) has been developed. This A-weighted sound level is called the “noise level,” which is referenced in units of A-weighted decibel(s). The human ear does not typically notice changes in noise levels of less than three A-weighted decibel(s). The equivalent noise level (L_{eq}) is the average A weighted sound level measured over a given time interval. L_{eq} can be measured over

any time period, but is typically measured for 1-hour periods and is expressed as $L_{eq}(h)$.

Land Uses

The land uses in the project area consist primarily of single-family, residential, and commercial uses (Figure 2-27). Noise-sensitive uses in the area are located along Broad Beach Road just north of Trancas Creek and consist of single-family residences and a private recreational facility. Additional noise sensitive uses are located along PCH between Surfside Drive and Seadrift Cove to the south. SR-1 is generally flat relative to the nearby land uses.

Noise Measurement Sites

The City General Plan, Noise Element, states that a community noise survey was conducted on July 16, 1992, to document the existing noise environment in the City. The locations chosen were representative of residential, commercial, and public use areas. Noise measurements were taken at 10 sites between the hours of 9:00 a.m. and 3:00 p.m. Each site was measured for 15 minutes. The site closest to the project is location no. 2 (PCH and Trancas Canyon Road) (Figure 2-27). These measurements (Table 2.23) provide a general sense of the noise level in each community.

Table 2.23 Ambient Noise Levels

Location	Time	L_{eq}	L_{min}	L_{max}
1. PCH and Decker Canyon Road	1:02	73	48	81
2. PCH and Trancas Canyon Road	12:30	70	57	78
3. PCH between Busch Drive and Morning View Drive	1:36	74	53	81
4. Dume Drive and Grayfox Street	11:54	63	37	74
5. PCH and Zuma Mesa Road	11:28	72	49	78
6. Malibu Country Drive/Vantage Point Terrace	2:16	52	36	65
7. PCH and Malibu Canyon Road	10:54	68	51	75
8. Cross Creek Road/Civic Center Way	9:48	64	48	75
9. Carbon Canyon Road/Carbon Mesa Road	9:22	49	32	59
10. PCH/Las Flores Canyon Road	2:48	72	51	79

Source: City of Malibu General Plan, Noise Element, Chapter 6.

L_{eq} = equivalent continuous sound level

L_{max} = maximum instantaneous noise level

L_{min} = minimum instantaneous noise level

PCH = Pacific Coast Highway

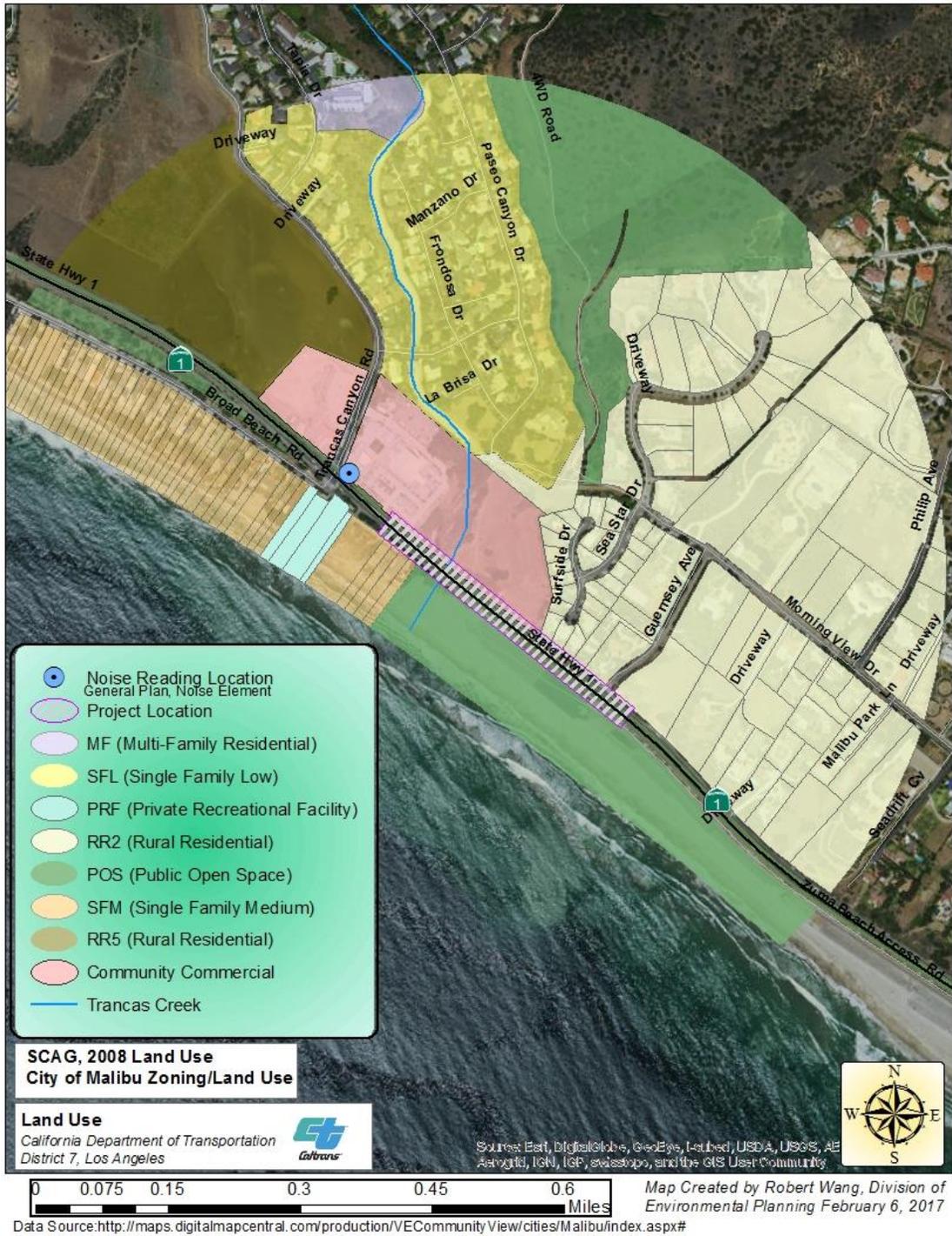


Figure 2-27 Noise Reading

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At the locations selected for the noise surveys, land uses included predominantly noise-sensitive land uses (e.g., residential neighborhoods). Less sensitive land uses (e.g., commercial) also exist. Currently, a commercial center (Trancas Country Market) is located northeast of the PCH/Trancas Canyon Road intersection, while more sensitive residential (single-family medium) uses exist northwest of the project site adjacent to Broad Beach Road.

In general, the predominant noise source in Malibu is motorist traffic from PCH, the major canyon roads, and local arterials. Stationary sources of noise include a wide range of recreational, commercial, and business activities. The noise level recorded in the Trancas Canyon Road and PCH area is consistent with the noise and land use compatibility guidelines, ranging from conditionally acceptable (Commercial) to normally acceptable (Residential).

2.12.3 Environmental Consequences

2.12.3.1 No Build Alternative – Alternative 1

If Alternative 1 is selected, there would be no change in existing conditions and therefore no noise-related impacts.

2.12.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

The existing bridge would be replaced with a new bridge either the same height (Alternative 3) or 2.5 feet above the existing height (Alternative 2). The bridge and adjacent roadway would be widened by a maximum of 9 feet to improve safety for bike and pedestrian use but would not increase capacity or the number of travel lanes for vehicles. The noise analysis concluded that neither build alternative would result in a substantial increase in noise levels; therefore, permanent noise abatement measures are not needed.

Temporary Construction-Related Noise Impacts

Noise impacts from construction of the proposed project are a function of the noise generated by construction equipment, the location and sensitivity of nearby receptors, and the timing and duration of noise-generating activities.

Because the construction of the proposed project would be conducted over an approximately 12- to 16-month period, noise from construction activities may intermittently dominate the noise environment in the area immediately surrounding the project. Caltrans' contractors are required to abide by Caltrans Standard Specifications, which state that noise levels generated during construction must

comply with all applicable local, State, and federal regulations, and that all equipment must be fitted with adequate mufflers according to the manufacturers' specifications.

Construction noise levels typically vary depending on the nature of the specific activities underway. Each construction activity generates its own noise characteristics resulting from the mix of construction equipment involved and the related work activity. The loudest construction noise levels are expected to result from demolition of the sides (rails) of the bridge structures and construction of the substructure and superstructure improvements. These activities involve the largest number of construction vehicles/equipment and equipment having the greatest noise-generating characteristics.

Table 2.24 summarizes the noise levels produced by construction equipment that is commonly used on roadway construction projects. Construction equipment is expected to generate noise levels ranging from 70 to 90 decibels (dB) at a distance of 50 feet, and noise produced by construction equipment would be reduced below that at a rate of about 6 dB per doubling of distance. Therefore, at 100 feet, noise levels would range between 64 dB and 84 dB. The nearest residential receptors are adjacent to southbound PCH, approximately 40 feet north of the bridge. South of the bridge, residential receptors between Surfside Drive and Seadrift Cove are located approximately 500 to 2,500 feet away.

Table 2.24 Typical Construction Equipment Noise

Equipment Description	L _{max} Noise Limit at 50 feet, dB	Equipment Description	L _{max} Noise Limit at 50 feet, dB
Auger drill rig	85	Gradall	85
Backhoe	80	Grader	85
Bar Bender	80	Horizontal boring hydraulic jack	80
Blasting	94	Hydra break ram	90
Boring jack power unit	80	Impact pile driver (diesel or drop)	95
Chain saw	85	Jackhammer	85
Clam shovel	93	Mounted impact hammer (hoe ram)	90
Compactor (ground)	80	Paver	85
Compressor (air)	80	Pickup truck	55
Concrete batch plant	83	Pneumatic tools	85
Concrete mixer truck	85	Pumps	77
Concrete pump truck	82	Rock drill	85
Concrete saw	90	Scraper	85
Crane (mobile or stationary)	85	Slurry Plant	78
Dozer	85	Slurry trenching machine	82
Dump truck	84	Soil mix drill rig	80
Excavator	85	Tractor	84
Flatbed truck	84	Vacuum street sweeper	80
Front-end loader	80	Vibratory concrete mixer	80
Generator (25 kVA or less)	70	Vibratory pile driver	95
Generator (more than 25 kVA)	82	Welder/Torch	73

Source: Federal Highway Administration (2006).

dB = decibels

kVA = kilovolt-amperes

L_{max} = maximum instantaneous noise level

2.12.4 Avoidance, Minimization, and/or Mitigation Measures

- NOI-1** All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. No equipment shall have an un-muffled exhaust.
- NOI-2** As directed by the Caltrans Resident/Project Engineer, the contractor shall implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.
- NOI-3** All work shall adhere to Caltrans Standard Specifications, Section 7-1.01I, “Sound Control Requirements,” which states that noise levels generated during construction will comply with applicable local, State, and federal regulations, and that all equipment will be fitted with adequate mufflers according to the manufacturers’ specifications.
- NOI-4** Noise control shall conform to the provisions in Section 14-8.02, “Noise Control,” of the Caltrans Standard Specifications.

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BIOLOGICAL ENVIRONMENT

2.13 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors, fish passage, and habitat fragmentation, as appropriate. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Wetlands and other waters are discussed in Section 2.14. Habitat areas that have been designated as critical habitat under the federal Endangered Species Act (FESA) are discussed in Section 2.17, Threatened and Endangered Species.

2.13.1 Regulatory Environment

Federal, State and local regulations provide protection for natural communities through the designation of special resource protection areas. These are areas that are important for the preservation of plant or animal species or their habitats because they are rare, vulnerable to disturbance or play a unique and important role in the life of a particular species. The following regulations provide protection for natural communities present within the project area.

2.13.1.1 Essential Fish Habitat (EFH)

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, including anadromous species. The 1996 amendments to the Act established the requirement to identify and describe Essential Fish Habitat, which are defined as “those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.” Federal agencies are required to consult with the National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service) when their actions or activities may adversely affect EFH.

Trancas Creek has been identified as potential habitat for the federally endangered southern steelhead trout (*Oncorhynchus mykiss*) and is shown in the Southern California EFH mapping for the Southern Steelhead Trout/Distinct Population Segment.

2.13.1.2 City of Malibu – Local Coastal Program – Environmentally Sensitive Habitat Areas (ESHA)

As permitted by the California Coastal Act, the City of Malibu has enacted and implemented its own local coastal program (LCP). The LCP has two components—Land Use Plan (LUP) and Local Implementation Plan (LIP)—which provide blueprints for the City’s short- and long-term use and protection of coastal resources, including water and land habitats.

The City’s LIP defines an ESHA as any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in the ecosystem and which could be easily disturbed or degraded by human activities and developments. The City’s General Plan further defines ESHAs within the City as “major riparian corridors; oak woodlands (including those in proximity to existing highways and/or residential, development); coastal wetlands and estuaries; offshore rocks and rocky shoreline areas; marine resources; kelp beds; undeveloped sandy beaches; coastal bluffs and coastal sand dunes between Arroyo Sequit and Paradise Cove.” Trancas Creek and Trancas Lagoon meet this definition of an ESHA.

The ESHA designation provides protection against significant disruption of habitat values and, with certain exceptions, only uses dependent on the resources present shall be allowed in such areas.

2.13.2 Affected Environment

The following technical study was prepared for the proposed project:

- Natural Environment Study (Caltrans, March 2017)

The Trancas Creek Bridge is located on PCH (or SR-1) at the base of the western slope of the Santa Monica Mountains. The bridge crosses over Trancas Creek approximately 300 feet upstream from the Pacific Ocean, adjacent to the west end of Zuma Beach.

Within the project area, Trancas Creek and Trancas Lagoon have a natural, albeit disturbed, soft bottom. Upstream of the project area, Trancas Creek is largely controlled and channelized. The area east of the project footprint is disturbed but largely undeveloped, containing mostly invasive plant species. It was historically part of the original Trancas Lagoon but was filled in and used as the Trancas Riders and Ropers area.

The Biological Study Area (BSA) is shown on Figure 2-28 and encompasses portions of Trancas Creek (below, upstream and downstream of the bridge), Trancas Beach and the western end of Zuma Beach, the “remnant” Trancas Lagoon, and the Riders and Ropers Area east of the creek.



Figure 2-28 Biological Study Area

Within the BSA, a total of six vegetative communities have been identified. These are shown on Figure 2-29 and discussed below.

2.13.2.1 Vegetation Communities

Trancas Creek and Trancas Lagoon function as part of a dynamic hydrologic system. Trancas Creek feeds into the ocean only when flows are strong during winter rains, as was demonstrated during the heavy rain storms of early 2017, which caused the creek and lagoon to be inundated with water. As the creek flow recedes and the beach berm closes due to wave action, the remaining water is trapped and forms what can be termed a “remnant lagoon;” it occupies a small portion of the historical lagoon footprint. Within this remnant lagoon, two coastal wetland communities can be found.

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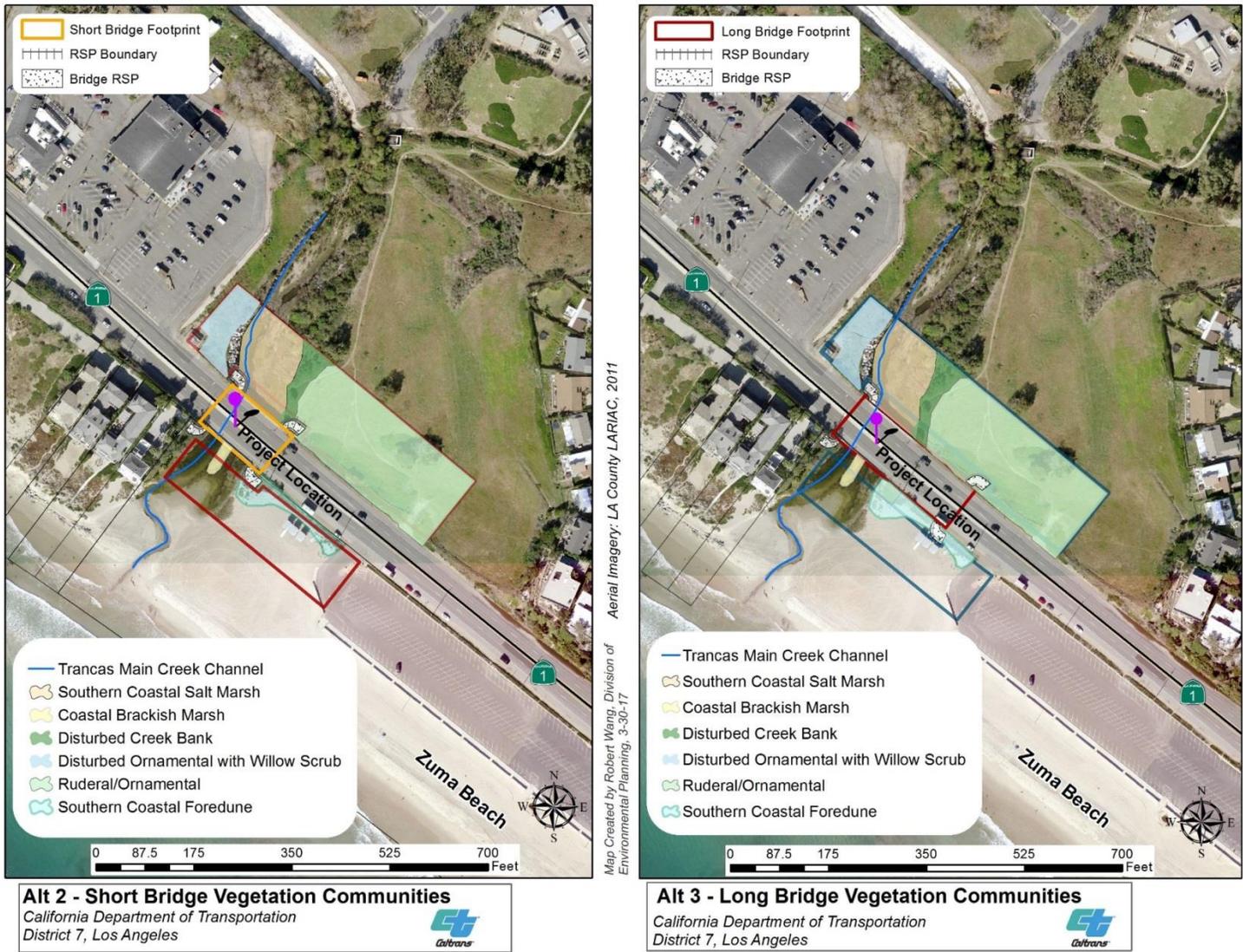


Figure 2-29 Vegetative Communities

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Southern Coastal Salt Marsh and Coastal Brackish Marsh

These two coastal wetland community types usually occur at the interior edges of coastal bays and estuaries or in coastal lagoons. Southern coastal saltwater marsh and coastal brackish marsh communities are dominated by perennial, emergent, monocots,¹ which are characteristic of both marsh habitats. The distribution of coastal salt water and coastal brackish marshes within Southern California has been severely impacted due to coastal development, recreation activities, and degradation of coastal habitat.

Southern Coastal Salt Marsh

The southern coastal salt marsh occupies approximately 0.34 acre of the BSA, which is a dominant portion of the project footprint and is located immediately north of the bridge. It was found to contain typical saltmarsh flora: fleshy jaumea (*Jaumea carnosa*) (the dominant species); salt grass (*Distichlis spicata*); salt heliotrope (*Heliotrope curassavicum* var. *oculatum*), spearscale (*Atriplex prostrata*); and small amounts of Parish's pickleweed (*Arthrocnemum subterminale*). The invasive grass species, riggut grass (*Bromus diandrus*), was also present.

Southern Brackish Marsh

The southern brackish marsh portion of the Trancas Lagoon occupies a small patch just downstream of the bridge (0.01 acre) and is dominated by California bulrush (*Schoenoplectus californicus*) and spearscale, as well as the nonnative annual beard grass (*Polypogon monspeliensis*).

Creek and Lagoon Banks

The western creek bank contains mostly RSP that was put in place many years ago to prevent erosion from washing out the creek bank and bridge abutment. There is minimal vegetation present.

Disturbed Riparian (Disturbed Eastern Creek Bank)

Although it occupies the riparian zone along the eastern bank of Trancas Creek, this portion of the channel contains mostly nonnative shrubs and tree species. Eucalyptus and myoporum (*Myoporum laetum*) are the dominant species, with other nonnative shrubs and landscape species also present.

¹ A monocot is a type of flowering plant whose seeds typically contain only one embryonic leaf.

Upland Areas

Beyond the banks of Trancas Creek and Trancas Lagoon are the upland areas that are beyond the limits of normal flowing/ponding water. These areas have been heavily disturbed, and the vegetation currently in place bears little resemblance to what was historically present.

Ruderal/Ornamental

This area previously contained coastal sage scrub habitat, but most of this upland habitat has been denuded by disking, weeding, and mowing. None of the native species normally occurring in coastal sage scrub remains within the project limits; only a small patch can be found approximately 215 feet north of the project area. Instead, the area is mostly covered by nonnative landscape and weedy species. There is a large patch of invasive ice plant (*Carpobrotus edulis*) adjacent to PCH, as well as a large eucalyptus tree and myoporum.

Disturbed Ornamental with Sandbar Willow Thicket (Salix Exigua) Shrub Alliance

This area lies between the top of the western creek bank and the paved parking lot for the Trancas Country Market. It contains a mixture of native and nonnative species as well as ornamental vegetation. The ornamental plants were likely planted in, and “escaped” from, nearby residential areas. Garland chrysanthemum (*Chrysanthemum coronarium*) is the dominant species in the area. Others include May weed (*Anthemis cotula*), western ragweed (*Ambrosia psilostachya*), garland chrysanthemum (*Chrysanthemum coronarium*), mugwort (*Artemisia douglasiana*), sea lavender (*Limonium californicum*), and other nonnative grasses.

There is also a small, pure stand of sandbar willow (*Salix exigua*) covering approximately 0.11 acre. This is likely a remnant of a larger zone of naturally occurring willow scrub that would have been a dominant species in and around Trancas Creek in the past, prior to human disturbance.

Beach Zone

Southern Coastal Foredunes

Areas of sand accumulation along the coast have historically supported southern coastal foredunes (i.e., the sand dunes located closest to the ocean). These dunes, and the plants that they support, are now much reduced in Southern California due to urban development and recreational beach activities.

A remnant southern coastal foredunes community is present just east of Trancas Creek and adjacent to the southbound lanes of PCH. It is approximately 0.15 acre of moderate- to low-quality dune complex. Species observed during plant surveys include beach primrose (*Camissoniopsis cheiranthifolia*), salt grass (*Distichlis spicata*), and sand verbena (*Abronia maritima*). Sand verbena has been given a ranking of 4.1 by the California Native Plant Society (CNPS), meaning it is rare, seriously threatened, and has limited distribution. This dune complex habitat also contains a large amount of nonnative invasive ice plant (*Carpobrotus edulis*), which is listed by the California Invasive Plant Council (Cal-IPC) as a highly invasive plant that is dominant on many dunes along the California coast. It dominates these fragile dune habitats and crowds out native species. Although this area is disturbed and non-pristine, it should be considered a sensitive habitat due to the presence of sand verbena.

Wildlife Corridors

Trancas Creek is relatively small and surrounded by development that hinders the movement of wildlife. In addition, medium to large mammals generally do not move toward the ocean during their daily or annual migrations. In addition, the amount of human activity around Trancas Beach and Trancas Lagoon is high, which would tend to further discourage animal movement through the area.

There was evidence, however, of raccoons and shorebirds utilizing Trancas Lagoon. Raccoons are common urban wildlife, so signs of raccoon activity are presumed to be just local individuals who travel to the lagoon area during nocturnal activity in search of food or human trash to scavenge. Shorebirds travel underneath the bridge from the beach to access the remnant lagoon for foraging. This diurnal movement is needed for shorebird species and wetland species to move from the beach zone to the lagoon.

Despite this “local” wildlife use, the project area is not expected to be used as a wildlife corridor.

Fish Passage

Steelhead trout were known to occur in Trancas Creek and were caught by local fishermen back in the 1950s. They have also been documented in the creek as recently as the 1980s.¹ However, road crossings, culverts, and concrete channels (the

¹ <http://www.malibusurfsidenews.com/trancas-creek-bridge-be-replaced-one-two-alternatives>, accessed March 4, 2017.

closest one being only 0.25 mile upstream of the bridge) within Trancas Creek present barriers that impede steelhead movement. The natural limit of fish passage is located approximately 3.4 miles upstream of the ocean.

Because of the artificial, man-made barriers, Trancas Creek is not currently designated as a steelhead stream by the NOAA Fisheries Service.¹ It is, however, on the EFH list of impaired creeks and is identified as a priority for restoration. Similarly, CalFish (a California Cooperative Anadromous Fish and Habitat Data Program that is responsible for the study, mapping, and conservation of steelhead in California) has identified Trancas Creek as an impaired creek that is listed for future restoration.

2.13.3 Environmental Consequences

A TCE will be obtained from adjacent property owners on either side of PCH to allow for construction access, staging, and storage (see Figure 2-30). The boundaries of the TCE will be marked and will represent the limits of construction activity; no disturbance will occur beyond the boundaries of the TCE. On the ocean side of the highway, and within the TCE, most of the coastal southern foredunes will be marked off as an Environmentally Sensitive Area (ESA) with no disturbance allowed within this area. A small portion of the foredunes next to the Zuma Beach parking lot will be disturbed to allow construction equipment to enter and exit the beach. The patch of willow scrub will also be protected as an ESA to prevent disturbance. With the exception of the ESAs, it is assumed that the entire TCE will be utilized and disturbed.

2.13.3.1 No Build Alternative – Alternative 1

Under Alternative 1, existing conditions would remain, and no impacts to natural communities would occur.

2.13.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Each of the communities present represents an isolated remnant of what was historically present in this area and offers little in the way of habitat value. Furthermore, both Alternatives 1 and 2 would result in minimal impacts, with there

¹ City of Malibu. October 2008. Trancas Canyon Park Final Environmental Impact Report, Section 4.3, Biological Resources.

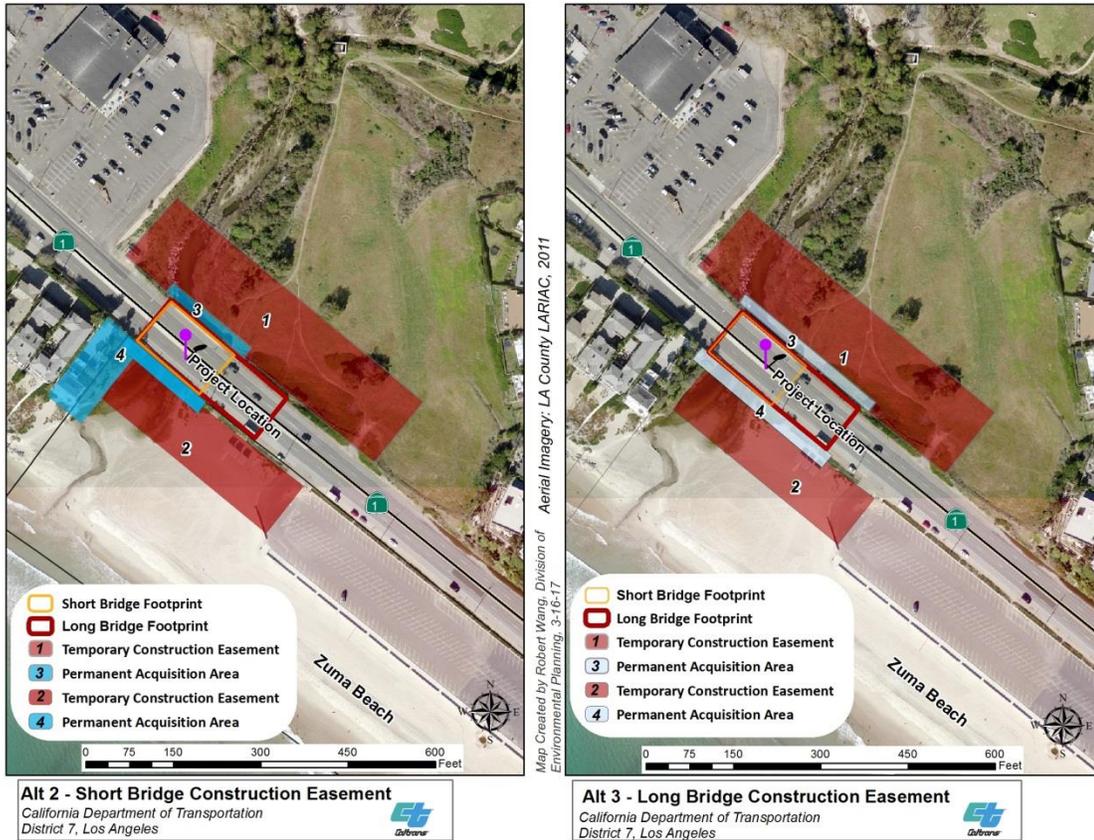


Figure 2-30 Temporary Construction Easements Under Alternatives 2 and 3

being little difference in impacts between the two because the footprints are very similar. Both the short bridge and the long bridge will be 9 feet wider than the existing bridge, with the widening occurring within existing Caltrans right-of-way on the ocean (southbound) side. There is a difference in impacts to upland communities due to the difference in the lengths of the two bridges (120 feet versus 240 feet) and the location of the eastern abutment.

Table 2.25 provides a summary of the anticipated temporary and permanent impacts to each of the habitat types described above that would result from the two build alternatives.

Wildlife Corridors

The project is not located in an area that is used as a wildlife corridor. No impacts to wildlife movement are expected to occur.

**Table 2.25 Anticipated Temporary and Permanent Impacts
to Habitat Under Alternatives 2 and 3**

Vegetation Community Type	Permanent Impacts (acres)	Temporary Impacts (acres)	Total (acres)
Alternative 2 – Short Bridge Replacement			
Southern Coastal Salt Marsh	0.03	0.37	0.40
Southern Brackish Marsh	0.00	0.03	0.03
Disturbed Riparian/Eastern Creek Bank	0.01	0.09	0.10
Disturbed Ornamental w/Sandbar Willow	0.00	0.17	0.17
Ruderal/Ornamental	0.01	1.12	1.13
Coastal Southern Foredunes	0.01	0.16	0.17
Alternative 3 – Long Bridge Replacement (Preferred Alternative)			
Southern Coastal Salt Marsh	0.07	0.37	0.44
Southern Brackish Marsh	0.00	0.03	0.03
Disturbed Riparian/Eastern Creek Bank	0.00	0.10	0.10
Disturbed Ornamental w/Sandbar Willow	0.00	0.17	0.17
Ruderal/Ornamental	0.01	1.12	1.13
Coastal Southern Foredunes	0.01	0.16	0.17

Fish Passage

As stated previously, Trancas Creek has the potential to be used by steelhead trout; however, several barriers located upstream of the bridge prevent this. The existing bridge is not a barrier to passage and, in the absence of any restoration activities in Trancas Lagoon and farther upstream, neither would either of the new bridges resulting from the build alternatives. In other words, neither the short nor the long bridge, by itself, would do anything to either facilitate or hinder fish passage.

In order for conditions favorable for fish passage to return, both Trancas Lagoon and Trancas Creek upstream would need to be restored. Both of these have been proposed. The RCD-SMM has conducted a feasibility study looking at various lagoon restoration options; they concluded that any restoration effort would need to enlarge the lagoon and would require additional tidal inflow in order to sustain itself. Also, the Los Angeles County Department of Public Works is proposing a study to evaluate restoring Trancas Creek. Should both of these ultimately come to fruition, the new Trancas Creek Bridge would need to be longer than the current bridge in order to give the restored lagoon a “wider mouth” and facilitate adequate water flow. The RCD-SMM study concluded that a 240-foot-long bridge would be optimal to sustain the benefits of their restoration.

The short bridge proposed in Alternative 2 would be 120 feet long, 20 feet longer than the existing bridge. It is, therefore, much shorter than the optimal length required to (potentially) facilitate fish passage in the future. However, the bridge would be

designed so that the abutment on the east side could be easily removed to allow the bridge to be lengthened in the future without replacing the entire structure. It should be noted that any future project to lengthen the bridge would have to go through its own environmental review and design process, which can take several years.

The long bridge (Alternative 3) would be 240 feet long and of sufficient length to accommodate a future lagoon restoration and fish passage. Under Alternative 3, no additional bridge work would be required to sustain the benefits of a lagoon restoration.

2.13.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures are proposed to avoid or minimize impacts to the southern coastal foredunes and sandbar willow scrub habitats:

- NC-1** Temporary Construction Easements (TCEs) will be obtained to provide the contractor with construction access on both sides of Pacific Coast Highway (PCH). The boundaries of the TCEs will be fenced, and construction activity will not be allowed to occur beyond these limits.
- NC-2** Most of the foredunes complex shall be delineated and identified as an Environmentally Sensitive Area (ESA) (a small portion will be affected by construction equipment as it enters/exits the beach). ESA fencing shall be installed and maintained during construction of the southbound lanes on the beach side of the bridge. A qualified biologist will oversee the installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.
- NC-3** The existing foredune habitat will be restored per California Department of Fish and Wildlife (CDFW) and/or California Coastal Commission permitting requirements.
- Restoration shall include restoring dune contours on Trancas Beach and replanting coastal dune flora species: red sand verbena, dune primrose, and dune beach grasses.
 - This area shall remain protected for a minimum of 2 years post-restoration to allow for regrowth of slow-growing dune species.
 - Educational and directional signs shall be installed to designate this sensitive area and guide people away from the area.

- NC-4** The sandbar willow scrub shall be delineated and identified as an ESA. ESA fencing shall be installed and maintained during construction to prevent intrusion into this area. A qualified biologist will oversee installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.
- NC-5** No heavy construction equipment will be stored on the beach.
- NC-6** Heavy equipment will be checked daily for leaks to avoid contamination. Drip pans will be placed under heavy equipment at the end of each day.
- NC-7** Following construction, all beach contours will be regraded to their original condition.

2.14 Wetlands and Other Waters

2.14.1 Regulatory Setting

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

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the United States Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Standard permits. There are two types of General permits: Regional permits and Nationwide permits. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE's Standard permits. There are two types of Standard permits: Individual permits and Letters of Permission. For Standard permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (U.S. EPA 40 Code of Federal Regulations [CFR] Part 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there

is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

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

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

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

2.14.2 Affected Environment

The assessment of potential impacts to Wetlands and other waters is described in the Natural Environment Study that was prepared for this project by Caltrans in 2017.

That document utilized the following additional studies that have occurred in the project area:

- Jurisdictional Delineation of State and Federal Wetlands and Waters, Update Summary Report, Trancas Creek and Lagoon, February 4, 2014, prepared by BioReg Consulting, Thousand Oaks, California.
- Biological Resources Report/Trancas Lagoon Feasibility Study, August 2015, Resource Conservation District of the Santa Monica Mountains, Topanga Canyon, California.
- Jurisdictional Wetland Delineation Report, CRAM Assessment, 2006, California Trout Inc., Excerpt Barrier Assessment Information.

The BSA was described earlier in this document in Section 2.13, Natural Communities.

2.14.2.1 Trancas Creek

Trancas Creek is shown as a blue-line stream on the United States Geological Survey (USGS) *Pt. Dume* quadrangle map. It is the main tributary of the Trancas Creek watershed, an 8.7-square-mile area on the western slope of the Santa Monica Mountains. This watershed generates significant but short duration peak flows that accumulate in the remnant lagoon near the mouth of the creek, under and upstream of the Trancas Creek Bridge¹ (Figure 2-31). It is a largely flood-controlled creek, there are two areas upstream that have been concrete lined and are managed by the Los Angeles County Flood Control District. The portion of Trancas Creek that is within the project footprint and the BSA is a natural, soft-bottom creek with sediments composed of alluvial sand, gravel, and unconsolidated parent material.

Trancas Creek is classified as a perennial creek² that flows into the Pacific Ocean. However, summer wave action causes a berm to develop that restricts direct flow into the ocean except during peak storm flows or breaching during large coastal storms. During the dry season, the creek within the project area typically separates into two main flow channels with a raised island in the middle.

¹ Resource Conservation District of the Santa Monica Mountains (RCD-SMM). August 2015. Trancas Lagoon Restoration Feasibility Study.

² A stream or river (channel) that has continuous flow in parts of its streambed all year round during years of normal rainfall.

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Figure 2-31 Trancas Creek Hydrologic Sections

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2.14.2.2 Trancas Lagoon

The lower portion of the creek was historically part of a larger coastal lagoon. Much of this lagoon was filled in many years ago for a variety of reasons and was most recently used as the site of a small rodeo (the Riders and Ropers Club). The current remnant lagoon is a small area located beneath and just upstream of the bridge. The amount of permanent ponding water in the lagoon varies from year to year and with the seasons. Its size fluctuates and is influenced by the amount of water flowing downstream during and after storm events and by extreme surf that breaches the natural sand berm that blocks the mouth of Trancas Creek each summer.

Within Trancas Lagoon, there is a persistent salt water marsh located just under and upstream of the Trancas Creek Bridge. It extends between 75 feet and 125 feet upstream of the bridge, and fluctuates in size and depth depending on rainfall and storm events. It contains water nearly year-round. The adjoining upland gravel bars contain typical saltmarsh flora of fleshy jaumea (*Jaumea carnosa*), salt grass (*Distichlis spicata*), salt heliotrope (*Heliotrope curassavicum* var. *oculatum*) spearscale (*Atriplex prostrata*), and small amounts of Parish's pickleweed (*Arthrocnemum subterminale*).

2.14.2.3 Federal and State Jurisdictions

USACE Jurisdiction

USACE regulatory jurisdiction under Section 404 of the CWA is based upon there being a connection between the water body and either: (1) navigable waters of the U.S., or (2) interstate or foreign commerce. Caltrans and USACE personnel conducted a routine field survey on July 26, 2016, to identify potential waters of the U.S. The survey was conducted using methods outlined in the USACE Wetlands Delineation Manual that involves examining specific sample points within potential wetlands for the presence of hydrophytic vegetation, hydric soils, and wetland hydrology. The survey revealed that the wetland boundary extends beyond the aquatic boundary of the remnant lagoon. Wetland soils and plant species indicated a boundary up to the edge of the embankment of Trancas Creek.

Areas that will be affected by the project that were determined to meet USACE jurisdictional criteria are shown on Figure 2-32.

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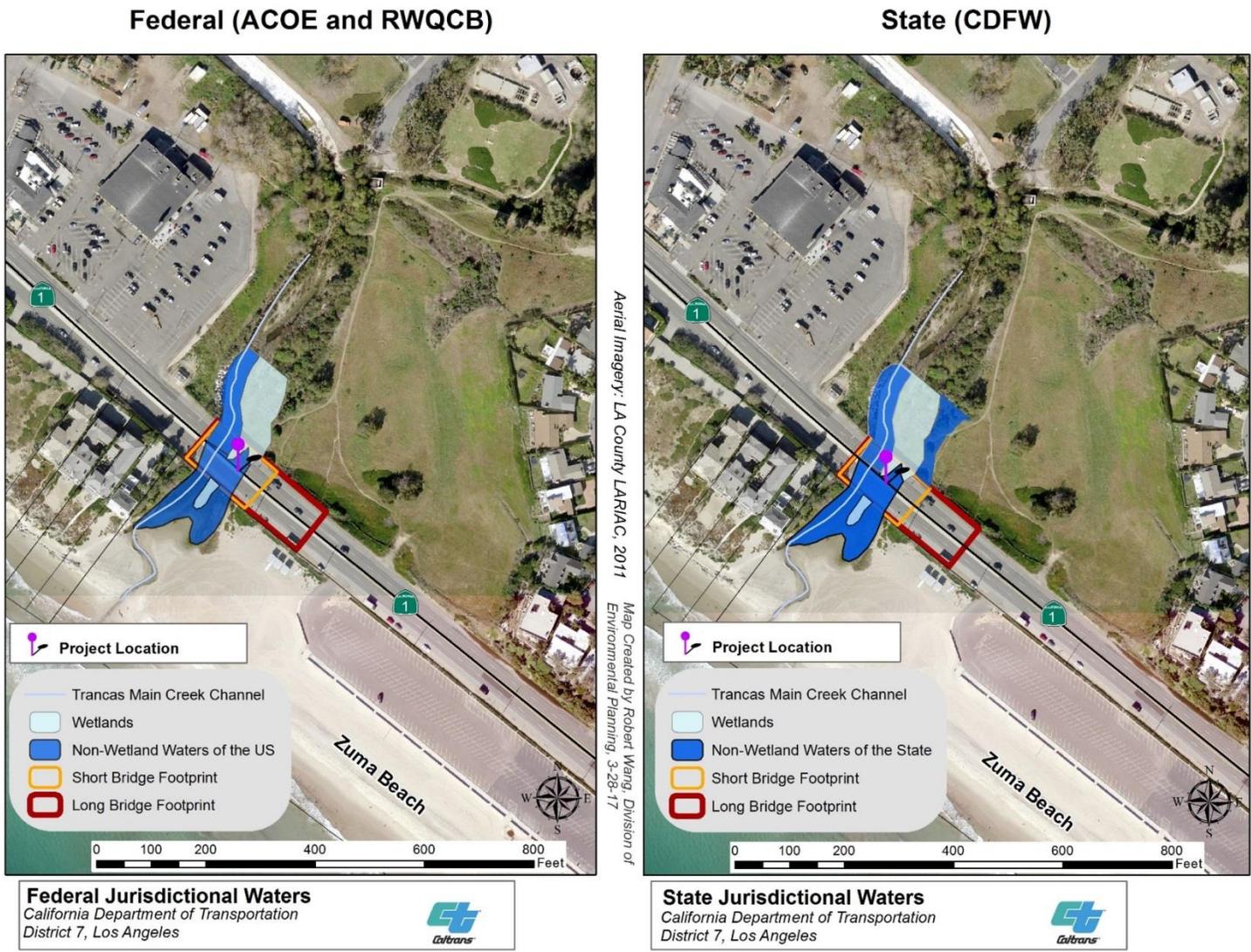


Figure 2-32 State and Federal Jurisdictional Waters

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CDFW Jurisdiction

CDFW jurisdiction typically extends to the top of a stream bank or to the limit of the riparian vegetation associated with a stream. Caltrans and CDFW personnel conducted a routine field survey on July 26, 2016, to identify potential waters of the State. Areas that will be affected by the project that are subject to jurisdiction under the CDFW are shown in Figure 2-32.

RWQCB Jurisdiction

Pursuant to Section 401 of the CWA, the RWQCB asserts jurisdiction over areas meeting the federal definition of wetlands and other waters of the U.S. Therefore, all the areas identified in Figure 2-32 as meeting the criteria for USACE jurisdiction also meet the criteria for RWQCB jurisdiction.

2.14.3 Environmental Consequences

2.14.3.1 No Build Alternative – Alternative 1

If the proposed project is not built, there will be no wetlands impacts.

2.14.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Permanent impacts to waters of the U.S. and waters of the State will result from the installation of new bridge piers, abutments, and supporting RSP. Alternative 2 (short bridge) is proposed as a two-span bridge with one set of support columns in the creek bed (i.e., within State and federal jurisdictional waters). Both abutments would also be within State and federal jurisdictional waters. Alternative 3 (long bridge) is proposed as a four-span bridge with three sets of support columns within State and federal jurisdictional waters. However, only the western abutment (with RSP) would be located in State and federal jurisdictional waters. The eastern abutment would be located in an area that is currently uplands and therefore non-jurisdictional.

Therefore, Alternative 2 is expected to have slightly greater permanent impacts to jurisdictional resources than Alternative 3.

Temporary impacts would result from disturbance created by construction equipment and personnel as they access the site, remove the old bridge, and construct the new bridge. These impacts would be restricted to the TCE, and it is assumed that the entire TCE, except for those areas denoted as ESAs, would be disturbed. Temporary impacts therefore would be the same for both the short- and long-bridge alternatives because the TCE within jurisdictional waters is the same.

Because of impacts to both waters of the U.S. and waters of the State, this project will require the following regulatory permits:

- USACE Clean Water Act Section 404 permit
- RWQCB Clean Water Act Section 401 Certification
- CDFW Lake or Streambed Alteration Agreement

Federal and State Jurisdictions

USACE Jurisdiction

All dredge and fill activities within waters of the U.S. are regulated by the USACE under Section 404 of the Clean Water Act. The proposed project has the potential to result in permanent impacts to no more than 0.12 acre and temporary impacts to no more than 0.77 acre of waters of the U.S. These are estimated impact calculations based on preliminary design information and are subject to modification following the USACE verification process. Table 2.26 provides a summary of the estimated impact areas.

Table 2.26 Estimated Impact Areas of Jurisdictional Waters

Impact Area	Permanent Impacts (acres)		Temporary Impacts (acres)	
	USACE and RWQCB	CDFW	USACE and RWQCB	CDFW
Alternative 2 – Short Bridge Replacement				
Wetlands	0.12	0.12	0.18	0.21
Non-Wetland Waters	0.00	0.00	0.59	0.94
Total	0.12	0.12	0.77	1.15
Alternative 3 – Long Bridge Replacement (Preferred Alternative)				
Wetlands	0.06	0.06	0.18	0.21
Non-Wetland Waters	0.00	0.00	0.59	0.94
Total	0.06	0.06	0.77	1.15

CDFW = California Department of Fish and Wildlife
RWQCB = Regional Water Quality Control Board
USACE = United States Army Corps of Engineers

CDFW Jurisdiction

Pursuant to California Fish and Game Code Section 1600-1603, any alterations within the streambed, bank, and channels of waters of the State are regulated by the CDFW. Temporary construction staging areas and access roads would be strategically placed to avoid and/or minimize impacts to CDFW jurisdictional features to the extent feasible. Permanent impacts totaling no more than 0.12 acre and temporary impacts totaling no more than 1.15 acres of CDFW waters of the State are estimated to occur. Please see Table 2.26 for further details.

RWQCB Jurisdiction

Pursuant to the CWA, all dredge and fill activities regulated under Section 404 are required to obtain a 401 Water Quality Certification from the RWQCB. Typically, waters of the State, as regulated under Section 401 of the CWA, reflect those waters that fall under USACE jurisdiction and also includes any isolated wetland or non-wetland acreage. The RWQCB is ultimately responsible for determining their jurisdiction over waters of the State pursuant to Section 401 of the CWA and water regulated under the Porter-Cologne Water Quality Control Act. As such, the proposed project is expected to result in permanent impacts to no more than 0.12 acre and temporary impacts to no more than 0.77 acre of RWQCB jurisdictional features. This is summarized in Table 2.26.

2.14.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures are being proposed to reduce impacts to the greatest extent practicable. They include a combination of BMPs and project-specific measures. Coordination with the USACE, RWQCB, and CDFW will continue during future phases of the project, resulting in permits from each of those agencies. Those permits may contain additional measures that will be implemented and adhered to as part of this project.

- WET-1** To reduce impacts to waters of the United States (U.S.) and waters of the State, all work within Trancas Creek and Trancas Lagoon should be performed between April 1 and November 1 to avoid the rainy season.
- WET-2** A water diversion plan shall be developed and implemented to reduce potential impacts to water quality.
- WET-3** The Temporary Construction Easement (TCE) shall be delineated by an Environmentally Sensitive Area (ESA) fence that will be checked daily and maintained throughout the life of the project. If a breach should occur in the ESA fence, the Resident Engineer shall be contacted immediately.
- WET-4** No construction equipment shall be operated outside the TCE.
- WET-5** All equipment entering and exiting waters of the U.S. or waters of the State shall be washed down before and after daily operation to reduce the potential spread of nonnative or invasive species.

WET-6 All heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in non-operating status.

WET-7 A “Wash-out Pan” shall be used to wash down any equipment that handles concrete or other chemical-based construction materials.

WET-8 Compensatory mitigation will be required for permanent impacts of 0.12 acre per the permits from the California Department of Fish and Wildlife (CDFW). Final details of compensatory mitigation will be determined with acceptance of signed permits. Typically, mitigation ratios range from 3:1 for riparian impacts to as high as 5:1 for wetland impacts.

The California Department of Transportation (Caltrans) will perform on-site mitigation to the extent feasible to restore 1.29 acres of temporarily impacted jurisdictional delineation wetlands and waters (Riverine & Seasonal Marshland) habitat as well as the sensitive coastal foredune habitat (if impacted).

All impact resulting from construction equipment and disturbance of jurisdictional habitat and sensitive habitat must be restored and/or mitigated.

2.14.4.1 Habitat Restoration

Caltrans intends to restore wetland and riparian habitat in order to minimize permanent impacts and enhance the habitat quality of Trancas Creek and Trancas Lagoon. Two options are being explored, depending on when the lagoon restoration project is implemented by the RCD-SMM. Either option will require approval by the permitting agencies mentioned above and is therefore subject to change.

Option A

This option will be implemented if the RCD-SMM lagoon restoration does occur concurrently with, or slightly later than, the bridge replacement. It will combine the restoration efforts with those being done by RCD-SMM and will result in a more efficient use of resources (i.e., money) and a greater overall enhancement of the Trancas Lagoon.

A1. Caltrans would restore only those areas disturbed within the TCEs, including riparian and adjacent upland areas.

- A2. The remainder of the required mitigation costs, as determined by the mitigation ratio approved in the resource agency permits, would be transferred to RCD-SMM to fund the Trancas Lagoon restoration.

Option B

This option will be implemented if the RCD-SMM lagoon restoration does not occur concurrently with, or slightly later than, the bridge replacement. In this case, Caltrans will conduct on-site restoration and enhancement of adjacent areas in compliance with resource agency mitigation ratios.

- B1. Caltrans would restore both the TCEs and an additional area—approximately 75 to 100 feet—upstream of the Trancas Creek Bridge.
- Exotic invasive species within Trancas Creek (such as tamarisk and arundo) would be removed and replaced with native species.
 - Exotic invasive species in the riparian buffer zone (the transitional area adjacent to Trancas Creek) would be removed and replaced with native species.
- B2. The restored land outside of Caltrans right-of-way would be transferred to another entity (RCD-SMM or a conservancy) to be managed and preserved following the agency-mandated 5-year monitoring period.

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2.15 Plant Species

2.15.1 Regulatory Setting

The United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. “Special status” is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Section 2.3.5, Threatened and Endangered Species, provides detailed information about these species.

This section of the document discusses all the other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Caltrans projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Sections 1900–1913, and the California Environmental Quality Act (CEQA), CA Public Resources Code, Sections 2100–21177.

2.15.2 Affected Environment

The assessment of potential impacts to special-status plant species is described in the Natural Environment Study that was prepared by Caltrans for this project in 2017. The BSA was described earlier in this document in Section 2.13, Natural Communities.

A list of special-status plant species known from the region was obtained by conducting searches of the California Natural Diversity Database Rarefind 5, the USFWS species list website¹ (Information, Planning, and Conservation System

¹ United States Fish and Wildlife Service. Information, Planning, and Conservation System. Website: <https://ecos.fws.gov/ipac>, accessed October 13, 2014, and February 17, 2017.

[iPAC]), and the Cal Flora database.¹ The searches included four USGS 7.5-minute quadrangle map areas: *Pt. Mugu*, *Oxnard*, *Camarillo*, and *Triunfo Pass*.

Special-status plant species are either listed as endangered or threatened under FESA or CESA, or rare under the California Native Plant Protection Act, or are considered to be rare or of scientific interest (but not formally listed) by resource agencies, professional organizations (i.e., CNPS), and the scientific community.

Based on this information, a total of 16 special-status plant species were identified that have the potential to occur or are known to occur in the BSA. Of these 16 species, 15 are federally and/or State-listed as endangered or threatened and are discussed in Section 2.17, Threatened and Endangered Species. Therefore, only one species, red sand verbena, will be discussed in this section.

A general field survey was conducted on March 4, 2015, and plant-specific surveys were conducted on April 26, May 4, and June 14, 2016, to determine if potentially suitable habitat for red sand verbena is present in the BSA. The results of the database searches and field surveys are summarized in Table 2.27.

Table 2.27 Special-Status Plants Potentially Occurring or Known to Occur in the Project Area

Common Name (Scientific name)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Plants				
Red sand verbena (<i>Abronia maritima</i>)	CNPS List 4.2	Limited to dune and sandy substrate habitats	Habitat Present Species Present	The southern coastal foredune complex is present on the beach side of Pacific Coast Highway. The species was observed during surveys.

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc.

It should be noted that Southern California has experienced 5 years of drought, from 2012 to 2017. Only recently, during the winter of 2016/2017, has the area

¹ Cal Flora database. Website: <http://www.calflora.org>, accessed October 13, 2014.

experienced a more normal (even above average) rainfall. This drought may have had an adverse effect on plant growth in the area.

The City of Malibu has a native tree protection ordinance that recognizes the habitat values of native oak (*Quercus species*), California walnut (*Juglans californica*), western sycamore (*Platanus racemosa*), alder (*Alunus rhombifolia*), or toyon (*Heteromeles arbutifolia*) trees and provides for their protection and preservation. This ordinance is described in Chapter 5 of the City's LCP and LIP and applies to those areas containing one or more individuals of these species that have at least one trunk measuring 6 inches or more in diameter, or a combination of any two trunks measuring a total of 8 inches or more in diameter when measured at 4.5 feet above natural grade.

2.15.3 Environmental Consequences

None of the trees identified in the City of Malibu native tree protection ordinance are present in the project area.

2.15.3.1 No Build Alternative – Alternative 1

Under Alternative 1, existing conditions would remain and no impacts to plant species would occur.

2.15.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Alternatives 2 and 3 have very similar footprints and TCEs. Impacts, therefore, are expected to be similar, although the long bridge alternative (Alternative 3) might have slightly more impact due to a slightly wider footprint near the foredunes complex.

Red Sand Verbena (Abronia maritima)

Red sand verbena was observed on the southern coastal foredune complex on the beach side of the project limits. This is a CNPS 4.2 (limited distribution) level rare plant species. Red sand verbena is not currently listed as threatened or endangered. The plant is found specifically on dune and sandy substrate habitats and, thus, its distribution is limited to these small and somewhat fragile habitats. Dunes have been severely impacted along the Southern California coast due to development. There are a few other recorded occurrences of this species nearby on Zuma Beach, as well as a dozen or so other occurrences along other beaches in Los Angeles County.

The foredune complex within the project area is also heavily impacted by invasive species, primarily ice plant, which is outcompeting the red sand verbena for space. The ice plant occupies more than 50 percent of the vegetative cover of the dune.

Because of the large turning radius of many types of construction equipment, a small portion of the foredune complex will be impacted as equipment accesses the beach via the Zuma Beach parking lot entrance. It is possible that a small number of individuals of this species may be affected.

2.15.4 Avoidance, Minimization, and/or Mitigation Measures

The same measures utilized for the protection of the southern coastal foredunes complex will provide protection for the red sand verbena.

PS-1 Most of the foredunes complex shall be delineated and identified as an Environmentally Sensitive Area (ESA) (a small portion will be affected by construction equipment as it enters/exits the beach). ESA fencing shall be installed and maintained during construction of the southbound lanes on the beach side of the Trancas Creek Bridge. A qualified biologist will oversee the installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.

PS-2 The existing foredune habitat will be restored per California Department of Fish and Wildlife (CDFW) and/or per City of Malibu through the Local Coastal Development Permit process, under the delegation of the California Coastal Commission.

- Restoration shall include restoring dune contours on Trancas Beach and replanting coastal dune flora species: red sand verbena, dune primrose, and dune beach grasses.
- This area shall remain protected for a minimum of 2 years post-restoration to allow for regrowth of slow-growing dune species.
- Educational and directional signs shall be installed to designate this sensitive area and guide people away from the area.

2.16 Animal Species

2.16.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.17 below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

2.16.2 Affected Environment

The assessment of potential impacts to special-status animal species is described in the Natural Environment Study that was prepared by Caltrans for this project in 2017. The BSA is described in Section 2.13, Natural Communities.

A list of special-status animal species known from the region was obtained by conducting searches of the California Natural Diversity Database and the USFWS species list website (iPAC).¹ The searches included four USGS 7.5-minute quadrangle map areas: *Pt. Mugu*, *Oxnard*, *Camarillo*, and *Triunfo Pass*.

¹ United States Fish and Wildlife Service. iPAC. Website: <https://ecos.fws.gov/ipac/>, accessed October 13, 2014, and February 17, 2017.

Based on this information, a total of 15 special-status animal species were identified that have the potential to occur or are known to occur in the BSA. All of these species are federally and/or State-listed as endangered or threatened and are discussed in Section 2.17, Threatened and Endangered Species.

2.16.2.1 Migratory Birds

Birds receive protection under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. These acts prohibit the “take” of migratory birds or eagles unless authorized by the USFWS.

Birds of Conservation Concern represent a special category of migratory birds that includes “species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act (ESA) of 1973.” Table 2.28 lists Birds of Conservation Concern that were obtained from the USFWS iPAC list of sensitive species.

An initial field survey was conducted on March 4, 2015, to evaluate the project area, identify the habitats present, and assess the potential for sensitive species to be present. Follow-up surveys were conducted in 2016, primarily to assess the presence of sensitive bird species, on March 22, April 26, May 4, June 14, and July 28.

2.16.2.2 Birds of Conservation Concern

Based on field surveys, it was determined that suitable habitat is present in the project area for Allen’s hummingbird and yellow warbler. Another five species (lesser yellowlegs, long-billed curlew, marbled godwit, short-billed dowitcher, and whimbrel), are not likely to be found within the project footprint but could be found foraging nearby along the shoreline.

2.16.2.3 Nesting Birds

Although not on the list of Birds of Conservation Concern, numerous nesting birds are also protected under the Migratory Bird Treaty Act and the California Fish and Game Code. During the field surveys, numerous bird species protected under the Migratory Bird Treaty Act were observed within the BSA. Wetland areas and the underside of bridges are common nesting areas for many bird species. It is therefore possible that nesting birds could be present within the BSA.

Table 2.28 Birds of Conservation Concern

Common Name (<i>Scientific name</i>)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Animals				
Allen's Hummingbird (<i>Selasphorus sasin</i>)	Breeding BCC Highest Priority	Open oak woodlands, streamside groves, and canyons	Present	Marginal breeding habitat is present; therefore, foraging activity is likely, but nesting is not expected.
Bell's Vireo (<i>Vireo bellii</i>)	Breeding BCC Highest Priority	Riparian	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Black Oystercatcher (<i>Haematopus bachmani</i>)	Year-round BCC Highest Priority	Rocky, open ocean shores	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Black Skimmer (<i>Rynchops niger</i>)	Year-round BCC Highest Priority SSC	Sand shores and alkali playas	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Brewer's Sparrow (<i>Spizella breweri</i>)	Year-round BCC Highest Priority	High sagebrush plains, slopes, and valleys with Great Basin sagebrush and antelope brush	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Burrowing Owl (<i>Athene cunicularia</i>)	Year-round BCC Highest Priority SSC	Open county	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Cactus Wren (<i>Campylorhynchus brunneicapillus</i>)	Year-round BCC Highest Priority	Typical in deserts or dry brushlands, but also found in suburban areas	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Costa's Hummingbird (<i>Calypte costae</i>)	Breeding BCC Highest Priority	Desert riparian, desert and arid scrub foothill habitats	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Lesser Yellowlegs (<i>Tringa flavipes</i>)	Wintering BCC Highest Priority	Marshes, mudflats, and shores	Absent, but adjacent	Foraging habitat is adjacent to the project footprint, but outside of the impact zone. Therefore, impacts to the species, and associated habitat, are not expected.

Table 2.28 Birds of Conservation Concern

Common Name (<i>Scientific name</i>)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Lewis' Woodpecker (<i>Melanerpes lewis</i>)	Wintering BCC Highest Priority	Open forests and woodlands	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Long-billed Curlew (<i>Numenius americanus</i>)	Wintering BCC Highest Priority	Meadows, seeps, and Great Basin grasslands	Absent, but adjacent	Foraging habitat is adjacent to the project footprint, but outside of the impact zone. Therefore, impacts to the species, and associated habitat, are not expected.
Marbled Godwit (<i>Limosa fedoa</i>)	Wintering BCC Highest Priority	Flooded tidal flats and coastal areas along the Pacific coast	Absent, but adjacent	Foraging habitat is adjacent to the project footprint, but outside of the impact zone. Therefore, impacts to the species, and associated habitat, are not expected.
Nuttall's Woodpecker (<i>Picoides nuttallii</i>)	Year-round BCC Highest Priority	Oak groves and foothill canyons	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Oak Titmouse (<i>Baeolophus inornatus</i>)	Year-round BCC Highest Priority	Oak woodlands	Absent	General habitat for this species is present within the project quadrangle and the species was observed foraging during a routine bird survey. No nesting habitat was observed within the project area. The species is likely to be found foraging, but no suitable nesting habitat is present within project area.
Peregrine Falcon (<i>Falco peregrinus</i>)	Wintering BCC Highest Priority	Numerous habitats, often found along coastlines	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Pink-footed Shearwater (<i>Puffinus creatopus</i>)	Year-round BCC Highest Priority	Coastal islands	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Red Knot (<i>Calidris canutus ssp. Roselaari</i>)	Wintering BCC Highest Priority	Tidal flats, shorelines, coastal mudflats, and sandy beaches	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Red-crowned Parrot (<i>Amazona viridigenalis</i>)	Year-round BCC Highest Priority	Lush areas in arid lowlands and foothills	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.

Table 2.28 Birds of Conservation Concern

Common Name (<i>Scientific name</i>)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Rufous-crowned Sparrow (<i>Aimophila ruficeps</i>)	Year-round BCC Highest Priority	Rocky, brushy hillsides and canyons	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Short-billed Dowitcher (<i>Limnodromus griseus</i>)	Wintering BCC Highest Priority	Flooded tidal flats and coastal areas along the Pacific coast	Absent, but adjacent	Foraging habitat is adjacent to the project footprint, but outside of the impact zone. Therefore, impacts to the species, and associated habitat, are not expected.
Short-eared Owl (<i>Asio flammeus</i>)	Wintering BCC Highest Priority SSC	Great Basin grasslands, marshes and swamps, meadows and seeps, valley and foothill grasslands, wetlands	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Western Grebe (<i>Aechmophorus occidentalis</i>)	Wintering BCC Highest Priority	Coastal bays and freshwater marshes	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Whimbrel (<i>Numenius phaeopus</i>)	Wintering BCC Highest Priority	Mudflats, beaches, and flooded fields	Absent, but adjacent	Foraging habitat is adjacent to the project footprint, but outside of the impact zone. Therefore, impacts to the species, and associated habitat, are not expected.
Least Bittern (<i>Ixobrychus exilis</i>)	Year-round BCC SSC	Marshes and swamps	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Black-vented Shearwater (<i>Puffinus opisthomelas</i>)	Wintering BCC Highest Priority	East of Cascade-Sierra Nevada crest, mountains and high valleys of the Mojave Desert and mountains at the south end of the San Joaquin Valley	Absent	The habitat associated with this species does not occur within the project area and the micro-habitat within the project limit is marginal; therefore, the species is not expected to occur within the project area.
Magnificent Frigatebird (<i>Fregata magnificens</i>)	Wintering BCC Highest Priority	Tropical seas	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.

Table 2.28 Birds of Conservation Concern

Common Name (Scientific name)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Xantus's Murrelet (<i>Synthliboramphus hypoleucus</i>)	Wintering BCC	Offshore islands	Absent	General habitat for this species is not present within the project quadrangle. Habitat is restricted to coastal islands within Channel Islands National Park. The species is not expected to be present within the project area.
Yellow Warbler (<i>Dendroica petechia</i> ssp. <i>Brewsteri</i>)	Breeding BCC Highest Priority SSC	Riparian	Present	The species was observed during spring surveys. Breeding habitat is marginal; therefore, foraging activity is likely, but nesting is not expected.
Cassin's Auklet (<i>Ptychoramphus aleuticus</i>)	Year-round BCC Highest Priority SSC	Offshore islands with enough soil for burrowing. Will nest in rock crevices, under buildings, and in debris.	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.
Fox Sparrow (<i>Passerella iliaca</i>)	Wintering BCC Highest Priority	Wooded areas, undergrowth, and brush	Absent	General habitat is present within the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present within the project area.

Source: United States Fish and Wildlife Service. Birds of Conservation Concern. Website: <https://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>, accessed on February 17, 2017.

BCC = Birds of Conservation Concern
SSC = State Species of Special Concern

2.16.3 Environmental Consequences

2.16.3.1 No Build Alternative – Alternative 1

Under Alternative 1, existing conditions would remain and no impacts to animal species would occur.

2.16.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Because of the similarity between the short bridge and long bridge alternatives (Alternatives 2 and 3, respectively), and because the TCE/work zone will be the same, the impacts associated with the two build alternatives are expected to be the same.

Allen's Hummingbird

Allen's hummingbird is considered a Bird of Conservation Concern by the USFWS and has been given the highest priority for conservation. It is generally found in oak

woodlands, along stream sides and in canyons. The species may be present during the breeding season, but breeding habitat within the project area is of poor quality. If present at all, Allen's hummingbird would likely be observed foraging, but not nesting. The avoidance and minimization measure listed below is expected to prevent impacts to this species.

Yellow Warbler

This species is considered a Bird of Conservation Concern by the USFWS and has been given the highest priority for conservation. The CDFW lists the yellow warbler as a species of special concern. It was observed foraging near Trancas Creek during spring surveys. Because breeding habitat in the project area is of poor quality, nesting is not expected to occur. The avoidance and minimization measure listed below is expected to prevent impacts to this species.

Lesser Yellowlegs, Long-Billed Curlew, Marbled Godwit, Short-Billed Dowitcher, and Whimbrel

These species all have potentially suitable foraging habitat along the shoreline near the project area. Establishing and enforcing the TCE boundary as described in Measure 2, and controlling noise impacts as described in Measure 3, will be sufficient to avoid impacts to the foraging behavior of these species.

Nesting Birds

For both build alternatives, construction activities such as vegetation removal, ground disturbance, and bridge demolition could destroy active nests or indirectly contribute to nest failure by exposing active nests to the elements and/or predators. Human activity close to an active nest could disrupt normal nesting activities and contribute to nest failure. Implementation of Measure 1 would restrict vegetation removal to the nonbreeding season or, if that is not feasible, require preconstruction surveys and other steps to reduce the potential for adverse impacts to nesting birds during construction.

2.16.4 Avoidance, Minimization, and/or Mitigation Measures

AS-1 Construction activity, including vegetation removal and bridge demolition, shall be scheduled to occur between September 2 and February 14 to avoid the bird nesting season. If that is not feasible, the California Department of Transportation (Caltrans) Biologist shall be notified at least 2 weeks in advance so that preconstruction nesting bird surveys can be conducted. If nesting birds are observed,

construction activity in the immediate area shall not occur until it is determined that the young birds have left the nest. A buffer zone shall be established and maintained during all phases of construction (150 feet for songbirds and 500 feet for raptors) to ensure that nesting birds are not adversely affected.

AS-2 Delineation of the Temporary Construction Easement (TCE) and monitoring as described in Section 2.17 for the western snowy plover will be carried out in order to prevent equipment and personnel from encroaching upon shorebird foraging habitat.

AS-3 If noise levels from construction exceeds 60 decibels (dB) at the edge of the TCE (110 feet from the edge of the bridge zone), then a sound barrier/blanket will be erected to minimize construction noise impacts.

2.17 Threatened and Endangered Species

2.17.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the federal Endangered Species Act (FESA): 16 USC Section 1531, et seq., and 50 CFR Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies (e.g., the FHWA) are required to consult with the USFWS and the NOAA Fisheries Service to ensure they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a No Effect finding. Section 3 of FESA defines take as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct.”

California has enacted a similar law at the State level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The CDFW is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits “take” of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CESA allows for take incidental to otherwise lawful development projects. For these actions, an incidental take permit is issued by the CDFW. For species listed under both the FESA and the CESA requiring a Biological Opinion under Section 7 of the FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (1) sovereign rights for the purposes of exploring,

exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (2) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

2.17.2 Affected Environment

The assessment of potential impacts to threatened and endangered species is described in the Natural Environment Study prepared for this project.¹ The BSA was described earlier in this document in Section 2.13, Natural Communities. The findings summarized in this section were based on extensive research and field surveys for special-status species in the biological study area and its vicinity. Prior to the surveys, record searches of the USFWS species list and the California Natural Diversity Database were conducted.

An official list of threatened and endangered species potentially occurring in the project area was provided by the USFWS on February 11, 2015, and was updated on February 17, 2017. A similar list was provided by the NOAA Fisheries Service on January 21, 2015, and was revalidated on February 24, 2017.

The reference material cited above indicated that a total of 28 federal and/or State endangered, threatened, or candidate species have the potential to occur in the BSA. Based on the field surveys conducted in 2015 and 2016, it was determined that suitable habitat is only present for two of these species: western snowy plover and coastal dunes milk-vetch. Therefore, implementation of the proposed project would have no impact on the 26 species for which suitable habitat is not present. This information is summarized in Table 2.29.

2.17.2.1 Federal Endangered Species Act Section 7 Consultation

Under Section 7 of FESA, Caltrans, under its delegated authority from the FHWA, is required to consult with the USFWS and/or the NOAA Fisheries Service to ensure that Caltrans is not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. A brief summary of the consultation process conducted for this project follows.

¹ California Department of Transportation. 2017. Natural Environment Study.

**Table 2.29 Listed Species Potentially Occurring or
Known to Occur in the Project Area**

Common Name (Scientific name)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Animals				
Riverside Fairy Shrimp (<i>Streptocephalus woottoni</i>)	FE	Vernal pools	Absent	General habitat for this species is not present in the project quadrangle, and no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Vernal Pool Fairy Shrimp (<i>Branchinecta lynchi</i>)	FT	Vernal pools	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Steelhead-Southern California DPS (<i>Oncorhynchus mykiss</i>)	FE	Coastal waters, palustrine creeks and rivers	Absent	Trancas Creek is historic habitat for Southern steelhead; however, Trancas Creek is a "constrained water body" due to flood control modifications. No steelhead have been recorded since these modifications were installed. The species is not expected to be present in the project area.
Tidewater Goby (<i>Eucyclogobius newberryi</i>)	FE	Estuarine, brackish wetlands	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. No brackish wetland tidal flowing waters are present. The species is not expected to be present in the project area.
California Red-legged Frog (<i>Rana draytonii</i>)	FT	Ponds in woodlands and/or grasslands, streambanks with plant cover	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Arroyo Toad (<i>Bufo californicus</i>)	FE	Washes, arroyos, sandy riverbanks	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Least Bell's Vireo (<i>Vireo bellii pusillus</i>)	FE SE	Riparian	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
California Least Tern (<i>Sterna antillarum browni</i>)	FE SE	Tidal flats, sea coasts, bays	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Light-footed Ridgeway's Rail (<i>Rallus obsoletus levipes</i>) (formerly known as Light-Footed Clapper Rail [<i>Rallus longirostris levipes</i>])	FE SE	Mudflats, salt marshes	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed within the project area during field surveys. The species is not expected to be present in the project area.

**Table 2.29 Listed Species Potentially Occurring or
Known to Occur in the Project Area**

Common Name (Scientific name)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Western Snowy Plover (<i>Charadrius alexandrinus nivosus</i>)	FT	Sparsely vegetated sand beaches, lagoons, river bars	CH present Species present	Species observed in the BSA. DCH in the project limits. Potential to nest and/or roost near the project limits.
Marbled Murrelet (<i>Brachyramphus narmoratus</i>)	FT SE	Coastal waters, isolated coastal islands	Absent	General habitat for this species is not present in the project quadrangle. Habitat is restricted to coastal islands in Channel Islands National Park. The species is not expected to be present in the project area.
Scripp's Murrelet (<i>Synthliboramphus hypoleucus scrippsi</i>)	Year-round BCC Highest Priority ST	Open ocean and offshore islands	Absent	General habitat for this species is not present in the project quadrangle. Habitat is restricted to coastal islands in Channel Islands National Park. The species is not expected to be present in the project area.
Coastal California Gnatcatcher (<i>Polioptila californica californica</i>)	FT	Chaparral, coastal sage scrub	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Southwestern Willow Flycatcher (<i>Empidonax traillii extimus</i>)	FE SE	Dense cottonwood /willow habitats with wet, moist soils and open understory	Absent	General habitat for this species is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Bald Eagle (<i>Haliaeetus leucocephalus</i>)	Wintering BCC Highest Priority SE	Ocean shore, lake margins, rivers	Absent	General habitat is present in the project quadrangle; however, no habitat was observed in the project area during field surveys. The species is not expected to be present in the project area.
Plants				
California Orcutt Grass (<i>Orcuttia californica</i>)	FE SE CNPS List 1B.1	Valley grassland, freshwater wetlands, wetland-riparian	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Braunton's Milk-vetch (<i>Astragalus brauntonii</i>)	FE CNPS List 1B.1	Chaparral, valley grassland, coastal scrub	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Coastal Dunes Milk-vetch (<i>Astragalus tener</i> var. <i>titi</i>)	FE SE CNPS List 1B.1	Moist sandy depressions (vernal pool) near coast, coastal bluffs, dunes; coastal strand, coastal sage scrub, dunes	Habitat Present	The habitat associated with this species is present in the project area, but the microhabitat in the project limits is marginal. This species was not observed during plant surveys. One recent occurrence was recorded in 2016 in the <i>Topanga</i> quadrangle. Dune habitat is marginal and degraded; therefore, the species is not expected to occur in project area.

**Table 2.29 Listed Species Potentially Occurring or
Known to Occur in the Project Area**

Common Name (Scientific name)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Gambel's Watercress (<i>Rorippa gambellii</i>)	FE CNPS List 1B.1	Marshes and swamps (freshwater or brackish)	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Lyon's Pentachaeta (<i>Pentachaeta lyonii</i>)	FE SE CNPS List 1B.1	Chaparral, valley grassland, coastal scrub	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Marsh Sandwort (<i>Arenaria paludicola</i>)	FE SE CNPS List 1B.1	Freshwater wetlands, wetland- riparian, marshes and swamps (freshwater or brackish)	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Salt Marsh Bird's- beak (<i>Cordylanthus</i> <i>maritimus</i> ssp. <i>maritimus</i>)	FE CNPS List 1B.1	Coastal strand, wetland-riparian	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Spreading Navarretia (<i>Navarretia fossalis</i>)	FT CNPS List 1B.2	Chenopod scrub, marshes, scrub	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Slender-horned spineflower (<i>Dodecahema</i> <i>leptoceras</i>)	FE SE CNPS List 1B.1	Chaparral, coastal sage scrub	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Nevin's Barberry (<i>Berberis nevini</i>)	FE SE CNPS List 1B.1	Chaparral, foothill woodland, coastal sage scrub	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
San Fernando Valley Spineflower (<i>Chorizanthe parryi</i> var. <i>fernandina</i>)	FPT SE CNPS List 1B.1	Coastal sage scrub	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Marcescent Dudleya (<i>Dudleya cymosa</i> ssp. <i>marcescens</i>)	FT SR CNPS List 1B.2	Volcanic or sandstone outcrops on lower slopes of moist canyons	Absent	The habitat associated with this species does not occur in the project area; therefore, the species is not expected to occur in the project area.
Verity's Dudleya (<i>Dudleya verityi</i>)	FT SR CNPS List 1B.2	Chaparral, foothill woodland, coastal sage scrub	Absent	The habitat associated with this species does not occur in the project area; therefore, the species is not expected to occur in the project area.

**Table 2.29 Listed Species Potentially Occurring or
Known to Occur in the Project Area**

Common Name (Scientific name)	Status	General Habitat Description	Habitat: Potential/ Absent	Conclusion and Rationale
Ventura Marsh Milk- vetch (<i>Astragalus</i> <i>pycnostachyus</i> var. <i>lanosissimus</i>)	FE SE CNPS List 1B.1	Coastal salt marsh, wetland-riparian	Absent	The habitat associated with this species does not occur in the project area and the microhabitat in the project limits is marginal; therefore, the species is not expected to occur in the project area.
Santa Monica Mountains Dudleya (<i>Dudleya cymosa</i> ssp. <i>Ovatifolia</i>)	FT CNPS List 1B.1	Chaparral, coastal sage scrub/shaded, rocky outcrops	Absent	The habitat associated with this species does not occur in the project area; therefore, the species is not expected to occur in the project area.

Absent (A): No habitat present and no further work needed.

Habitat Present (HP): Habitat is, or may be present. The species may be present.

Present (P): The species is present.

Critical Habitat (CH): The project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present.

Status: Federal Endangered (FE), Federal Threatened (FT), Federal Proposed (FP, FPE, FPT), Federal Candidate (FC), Federal Species of Concern (FSC), State Endangered (SE), State Threatened (ST), Fully Protected (FP), State Rare (SR), State Species of Special Concern (SSC), California Native Plant Society (CNPS)

BSA = Biological Study Area

DCH = Designated Critical Habitat

DPS = distinct population segment

Western Snowy Plover (United States Fish and Wildlife Service)

Informal Section 7 consultation with the USFWS, Ventura office, was initiated on February 11, 2015, to discuss the potential presence of, and impacts to, the western snowy plover. Potential impacts to Designated Critical Habitat located on Zuma, Trancas, and Broad Beaches were also discussed. The USFWS provided information regarding annual western snowy plover surveys that have been performed for the USFWS on Zuma Beach since 2009. The data indicate a colony of western snowy plover has been observed on Zuma Beach for many years.

A small flock of western snowy plover was discovered on Trancas Beach during a general breeding bird survey on June 14, 2016. The Ventura office of the USFWS was contacted, and a late season western snowy plover survey was initiated to determine the population status of breeding western snowy plover at Trancas Beach. Surveys were conducted between July 26 and August 16, 2016, using survey guidelines provided by the USFWS (there are no federally or State-mandated survey protocols for this species). All surveys were conducted by a team of three Caltrans Biologists in the early morning hours to capture breeding and foraging activity. The area surveyed extended from Trancas Beach south to Lifeguard Station No. 9 on Zuma Beach, approximately 0.5 mile south of the project.

Based on the results of these surveys, Caltrans submitted a letter to the USFWS on October 11, 2016, requesting concurrence with the determination that this project may affect, but is not likely to adversely affect, western snowy plover and its designated critical habitat. The USFWS responded with a letter on March 2, 2017 (Appendix H, Species Lists), concurring with this determination, and including several measures proposed to help avoid and minimize impacts. The measures are included in Section 2.17.4, Avoidance, Minimization, and/or Mitigation Measures.

Steelhead Trout (NOAA Fisheries Service)

Caltrans submitted a request for a list of threatened and endangered species under the jurisdiction of the NOAA Fisheries Service on January 8, 2015. The NOAA Fisheries Service responded with a letter on January 21, 2015, indicating the project is located within the boundaries of the federally endangered Southern California Coast distinct population segment of steelhead trout. The NOAA Fisheries Service went on to say it does not expect this species to be present in the project area because the NOAA Fisheries Service is not aware of any records indicating the recent presence of steelhead in Trancas Creek. The NOAA Fisheries Service also stated that Trancas Creek is not designated as critical habitat for steelhead trout. These statements were revalidated in an email received from the NOAA Fisheries Service on March 8, 2017.

2.17.3 Environmental Consequences

2.17.3.1 No Build Alternative – Alternative 1

Under Alternative 1, existing conditions would remain and no impacts to threatened or endangered species would occur.

2.17.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Alternatives 2 and 3 have very similar footprints and TCEs. Impacts therefore are expected to be similar, although Alternative 3 (long bridge) might have slightly more impact due to a slightly wider footprint near the foredunes complex.

Coastal Dunes Milk-Vetch (Astragalus tener var. titi)

The coastal dunes milk-vetch is known to occur on coastal bluffs and dunes. There was a sighting in the nearby *Topanga* quadrangle in 2016. In the project area, the dune habitat is marginal and degraded. The species was not observed during several focused plant surveys, albeit under drought conditions. Due to the marginal and degraded habitat, this species is not expected to be present. Therefore, no impacts will occur.

Western Snowy Plover

Western snowy plover were observed during each of the morning surveys conducted for this project. Siting locations ranged from just north of the project area on Trancas Beach to Lifeguard Tower No. 10 on Zuma Beach, approximately 0.5 mile south of the project area. White snowy plover were seen in small numbers foraging along the beach surf line in the early morning hours and roosting (nesting) on the upper beach areas among the beach rack later in the morning. All of these observances were located outside the TCE, with one exception of a clutch of white snowy plover that was temporarily roosting on the upper beach near the foredune.

Trancas and Zuma Beaches are very heavily used for recreational activities (e.g., surfing, swimming, dog walking, and surf camps). Zuma Beach is also groomed daily during the summer by Los Angeles County Beaches and Harbors personnel to remove trash and debris. All of this activity results in a chronically high level of ambient noise and disturbance that the white snowy plover are exposed to and, judging from their presence in the area, have somewhat adapted to.

With this chronic exposure to noise and human presence, the additional presence of construction activity is not expected to result in any impacts to white snowy plover foraging in the surf and near the tideline. The TCE, however, will marginally encroach on the upper beach area where roosting can occur. The TCE is also located in designated critical habitat. Therefore, white snowy plover will be temporarily excluded from a small portion of designated critical habitat that could be used for roosting.

To ensure that impacts to both white snowy plover and the designated critical habitat are minimized, Caltrans will adhere to the avoidance and minimization measures proposed by the USFWS. Given the low level of potential impact, the USFWS has determined this project may affect, but is not likely to adversely affect, white snowy plover or its designated critical habitat.

Steelhead Trout

Based on the letter and email received from the NOAA Fisheries Service, impacts to steelhead trout are not expected.

2.17.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures were included in the “may affect but not likely to adversely affect” determination from the USFWS regarding white snowy plover. These

measures will be implemented to ensure that impacts are reduced to the maximum extent practicable.

TE-1 The Temporary Construction Easement (TCE) will be delineated, fenced off, and monitored by a District Biologist from the California Department of Transportation (Caltrans) Division of Environmental Planning or a qualified on-call biologist during the nesting and breeding season (March 1 to September 30), as well as during the wintering season (October 1 to February 28). During normal construction activity, the biologist will monitor daily for western snowy plover eggs, nests, or nesting behavior in the project construction zone within the TCE. If any snowy plover eggs are discovered or individuals demonstrate nesting behavior within the TCE, or if any snowy plovers are observed in the construction zone during the non-breeding season, all work will stop until the fledglings and/or adults have vacated the area. The Ventura Fish and Wildlife Office will be called to inform staff of nesting activity and potential re-initiation of Section 7 consultation. Biologists have the authority to stop all construction activity and will be in charge of the monitoring activity. If an on-call biologist is used, they must report daily activities to the Caltrans biologist.

TE-2 Duties of the on-call biologist will include:

- Checking for nesting or roosting behavior prior to the start of work for each operational day;
- Ensuring beach equipment operators are current with western snowy plover awareness training for beach work operation;
- Checking western snowy plover fencing for any damage, breaks, or openings;
- Completing a daily log report to be turned into the Resident Engineer and Caltrans Office;
- Ensuring local citizens are aware of western snowy plover activity in the area and providing western snowy plover awareness material to beach goers; and
- Informing Los Angeles County Beaches and Los Angeles County Lifeguards of western snowy plover activity if any individuals are observed.

- TE-3** If nesting behavior and/or a nest is discovered, the following procedures will be initiated:
- If eggs or nests are discovered, then additional fencing will be installed with a minimum radius of 150 feet from the nest, and all construction activity will halt until the young have fledged;
 - Nests will be monitored daily and a daily western snowy plover log sheet of activity will be completed and turned into the Resident Engineer, and a copy sent to the Caltrans District 7 Office; and
 - If eggs or nests are discovered, then Ventura Fish and Wildlife Office staff will be notified as soon as possible for updates and additional guidance.
- TE-4** Construction activity on the beach will be minimized to the extent feasible.
- If feasible, construction on the beach zone will occur outside of bird nesting season (September 30 to March 1).
 - The TCE will be maintained until construction ends and is defined by the Caltrans Design Engineer. Caltrans will coordinate with the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), and the California Coastal Commission for feedback on beach zone activity and necessary coastal zone protection requirements.
 - The construction staging area will be located on either the north side of Pacific Coast Highway (PCH) (open land east of Trancas Creek) or on the west end of the Zuma Beach parking lot.
 - During construction, equipment will not be allowed to be stored on the beach.
- TE-5** Caltrans will present a western snowy plover awareness training program to all construction staff that may use the beach zone for construction activity. This program will describe the following information:
- The behavior of the western snowy plover and its distribution and habitat on Zuma Beach,
 - Threats to western snowy plover,

- The detrimental effects of feeding wildlife,
- The penalties for disobeying restrictions,
- A map showing the TCE zone and proper Best Management Practices (BMPs) for minimizing beach impact,
- The proper procedure to address injured or dead western snowy plovers, and
- The contact information of the Caltrans District Biologist and Resident Engineer.

TE-6 If noise levels from construction exceed 60 decibels (dB) at the edge of the TCE (110 feet from the edge of the bridge zone), then a sound barrier/blanket will be erected to minimize construction noise impacts.

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2.18 Invasive Species

2.18.1 Regulatory Setting

On February 3, 1999, President Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order 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 whose introduction does or is likely to cause economic or environmental harm or harm to human health.” FHWA guidance issued August 10, 1999, directs the use of the State’s invasive species list maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the NEPA analysis for a proposed project.

2.18.2 Affected Environment

The assessment of potential impacts associated with invasive species is described in the Natural Environment Study prepared for this project.¹ The BSA was described in Section 2.13, Natural Communities.

The California Invasive Species Advisory Committee is a State-sponsored entity that was established in 2009 to inform and advise the Invasive Species Council of California (ISCC) on matters related to invasive species in the State. One of its tasks was to create a list of “invasive species [both plants and animals] that have a reasonable likelihood of entering or have entered California for which an exclusion, detection, eradication, control or management action by the state might be taken.”²

The Cal-IPC is a 501(c)(3) nonprofit organization established in 1992 to protect California’s lands and waters from ecologically damaging invasive plants. Cal-IPC maintains the California Invasive Plant Inventory,³ which is a comprehensive list of invasive plants based on their ecological impacts. Cal-IPC provides a rating of “high,” “moderate,” “limited,” or “alert” to each species depending on the degree of threat it poses to natural plant and animal communities in California.

¹ California Department of Transportation. 2017. Natural Environment Study.

² State of California. The California Invasive Species List. Website: <http://www.iscc.ca.gov/species.html>, accessed February 7, 2017.

³ California Invasive Plant Council. California Invasive Plant Inventory. Website: <http://cal-ipc.org/paf/>, accessed February 7, 2017.

No invasive animal species were observed within the project area. Invasive plant species were observed in both the Trancas Creek and upland areas.

The two most prevalent invasive plants within Trancas Creek are salt cedar (also known as tamarisk) (*Tamarix ramosissima*) and arundo (*Arundo donax*). Cal-IPC has given both of these a “high” rating. A variety of invasive weedy grasses are also found in the creek bed.

Ice plant (*Carpobrotus edulis*) is found growing over a large portion of the remnant dune on the beach side of PCH. This species was also given a “high” rating by Cal-IPC.

Within the upland area, several invasive species were observed, including brass buttons (*Cotula coronopifolia* L.), wild radish (*Raphanus sativus*), castorbean (*Racinus communis*), and riggut grass (*Bromus diandrus*). Cal-IPC has ranked these species as moderate to highly invasive.

2.18.3 Environmental Consequences

2.18.3.1 No Build Alternative – Alternative 1

Under Alternative 1, the existing conditions would remain and no impacts or improvements to invasive species would occur.

2.18.3.2 Build Alternatives – Alternative 2 and Alternative 3 (Preferred Alternative)

Both Alternatives 2 and 3 have potential to spread invasive plant species via entering and exiting construction vehicles and equipment that have been contaminated by invasive plant species, the inclusion of invasive plant species in seed mixtures and mulches, and the improper removal and disposal of invasive plant species. However, none of the species on the California list of invasive species is used by Caltrans for erosion control or landscaping purposes. In addition, all equipment and materials will be inspected for the presence of invasive species prior to use.

The net result is that both Alternatives 2 and 3 are expected to have the beneficial effect of removing invasive species from the project area, either through removal and disposal during construction or as part of post-construction restoration efforts.

2.18.4 Avoidance, Minimization, and/or Mitigation Measures

IS-1 In compliance with Executive Order (EO) 13112 regarding Invasive Species as well as guidance from the Federal Highway Administration

(FHWA), the landscaping and erosion control included in the project will not use species listed as invasive. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

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2.19 Construction Impacts

2.19.1 Land Use Construction Impacts

In order to avoid loss of parking spaces, Caltrans is proposing to permanently relocate utility poles within Caltrans right-of-way and will coordinate with officials from the Los Angeles County Department of Beaches and Harbors during the right-of-way land acquisition process. The TCE area is needed during construction but will be returned to its original state post-construction. Detailed design and construction of the Trancas Creek Bridge will be further discussed between the PDT and the Los Angeles County Department of Beaches and Harbors during the design phase. This project proposes that traffic control be implemented during construction to ensure unimpeded access to Zuma Beach.

2.19.2 Community Construction Impacts

The purpose of the proposed project is to ensure that a safe and reliable roadway is available for all traveling public in the City of Malibu and adjacent regions. None of the proposed project components will disrupt the existing fabric of the surrounding neighborhoods, change the existing community relationships, interfere with the operation of existing community facilities or public services, affect housing availability, or require the replacement or relocation of any persons or businesses.

2.19.3 Relocations and Real Property Acquisition

Caltrans is proposing to permanently (Alternative 2) or temporarily (Alternative 3) relocate a residential home to the northwest of the Trancas Creek Bridge. Caltrans will coordinate with the home owner to ensure the smooth transition during the relocation and right-of-way land acquisition process. Caltrans will also provide the homeowners and residents with the benefits outlined by the Caltrans Relocation Assistance Program (see Appendix D). Details regarding relocation and right-of-way acquisition for the Trancas Creek Bridge will be further discussed between the project development team and the homeowner and residents during later phases.

2.19.4 Traffic Construction Impacts

Construction of the proposed project will likely have short-term effects on local accessibility. Bridge replacement for this project will be completed by replacing one half of the bridge at a time. This will allow for continuous traffic flow throughout the construction duration, even though the roadway capacity will be cut in half with one traveling lane for each direction. Construction for this project is expected to impact approximately 2,000 feet of the roadway. Beach access will be preserved for all users at all times during construction.

2.19.5 Visual Construction Impacts

During construction, heavy construction equipment and machinery would be present in the project area. All equipment used in construction and demolition of the project would have a minor, temporary visual effect and would be removed upon completion of the project.

2.19.6 Cultural Construction Impacts

If buried cultural materials are encountered during construction, Caltrans' policy is that work stops immediately in that area until a qualified archaeologist can evaluate the nature and significance of the find. Work can only resume after the approval to proceed has been given by a qualified Caltrans archaeologist or a Caltrans Heritage Resource Coordinator. In the case of human remains discovery, State Health and Safety Code Section 7050.5 requires that all work stops immediately, no further disturbance occur in the immediate vicinity of the remains, and the County Coroner be contacted immediately.

2.19.7 Hydrology and Floodplain Construction Impacts

The hydrology of Trancas Lagoon will be temporarily affected during construction with the placement of falsework and construction equipment in the creek bed. Water may be diverted and groundwater might be pumped out of the work site. However, work will be done during the dry season with low water flow. All temporarily disturbed areas will be returned to their original condition post-construction.

2.19.8 Storm Water Construction Impacts

Proposed project construction can involve grading and soil compaction, an increase in impervious surfaces (e.g., shoulders and bike lane), or a reduction of vegetative cover, all of which reduce infiltration.

During construction of the new bridge, temporary soil disturbance impacts of about 1 acre for access and equipment storage would be expected within Trancas Creek for approximately 5–7 months of construction during the non-rainy season.

Work inside Trancas Lagoon would be inside waters of the U.S.; thus, the proposed project would require a 1600 Streambed Alteration Agreement and Section 401 and 404 water quality certification. While construction activities have the potential to increase discharge of accidental pollutants into the storm drain systems, required implementation of temporary BMPs will reduce the potential of accidental discharge. BMPs are designed to maintain construction areas in such a condition that storm flows do not carry pollutants off site into the drainage system.

2.19.9 Geology/Soils/Seismicity/Topography Construction Impacts

Groundwater for the project location was encountered between 15- and 20-foot depths at the bridge abutment locations. The groundwater levels at these locations may vary with tidal fluctuations and may need to be pumped out.

Due to the proximity of the site to residential and commercial structures, noise and ground vibrations are additional potential issues with regard to driven piles. Pile-driving conditions will need to be evaluated and, if necessary, controlled and monitored to reduce the potential negative impacts from noise/sound and ground vibrations to adjacent structures.

Construction and pile driving would not alter the regional stress regime; thus, it would not contribute to the occurrence of an earthquake or alter the geotechnical properties of the sediment.

2.19.10 Hazardous Waste Construction Impacts

Worker safety and public health are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

During construction, exposure to contaminants associated with existing thermoplastic traffic striping/pavement markings and treated wood waste can be avoided fully, or minimized as needed, through adherence to protocols for the removal, handling, and disposal of such. Furthermore, a project-specific aerially deposited lead investigation will be implemented to more accurately assess lead-impacted soils in the project study area. The scope of the aerially deposited lead investigation will be dictated by which project build alternative is selected and, more specifically, by construction features during the final phases of design.

In addition, groundwater will be encountered during construction that will require dewatering. As a result, groundwater will be tested during the final design phase to assess and determine the extent of potential contamination. The test data will also be necessary when applying for NPDES permits and WDRs from the RWQCB for discharge into municipal storm drains, applying for a permit from the Los Angeles County Sanitation District for discharge to the municipal sewer, or disposal. Groundwater testing will also address potential contamination due to nearby sources and confirm any impacts from past releases.

2.19.11 Air Quality Construction Impacts

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment are also anticipated and would include carbon monoxide (CO), nitrogen oxides (NO_x), VOCs, directly-emitted particulate matter (PM₁₀ and PM_{2.5}), and toxic air contaminants (e.g., diesel PM). Ozone (O₃) is a regional pollutant that is derived from NO_x and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involves clearing, cut-and-fill activities, grading, removing or improving existing roadways, building bridges, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM₁₀ and PM_{2.5}, and small amounts of CO, SO₂, NO_x, and VOCs to be of concern. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an additional source of airborne dust after the mud dries. PM₁₀ emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM₁₀ emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

In addition to fugitive dust emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs, and some soot particulate (PM₁₀ and PM_{2.5}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

During project construction, objectionable odors would be mainly related to the operation of diesel-powered equipment and off-gas emissions during road-building activities (e.g., paving and asphaltting). SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOC emissions from paving, asphalt, concrete curing, and cement coatings operations. Construction of the proposed project shall comply with

all applicable SCAQMD Rules. While construction equipment on site would generate some objectionable odors, primarily arising from diesel exhaust, these emissions would generally be limited to the project site and would be temporary in nature.

2.19.12 Noise Construction Impacts

Construction noise levels typically vary depending on the types of activities being performed. Each construction activity generates its own noise characteristics resulting from a mix of construction equipment involved and the related work activity. The loudest construction noise levels are expected to be generated during the demolition phases.

Construction equipment is expected to generate noise levels ranging from 70 to 90 dB at a distance of 50 feet. Noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. Therefore, at 100 feet, noise levels would range between 64 dB and 84 dB.

The nearest sensitive residential receptors are at southbound PCH, north of the bridge at approximately 40 feet, and further south of the bridge on northbound PCH between Surfside Drive and Seadrift Cove at approximately 500 feet to 2,500 feet. The other surrounding land uses in the immediate project vicinity are zoned as commercial and open space.

All construction activities are to occur between the hours of 9:00 p.m. and 6:00 a.m., and shall not exceed 86 dBA at a distance of 50 feet. No construction activity is expected to occur on Sundays or on legal holidays. Construction noise will comply with the City of Malibu Noise Ordinance.

2.19.13 Biological Construction Impacts

Temporary impacts from construction would affect a total of 1.15 acres of wetland and waters of the U.S. and State for approximately 5–7 months of construction during the non-rainy season. The on-site restoration would include returning creek/channel flow to its original grade and flow, native revegetation planting, and restoring Trancas Lagoon.

A TCE area would be established to minimize impacts to Trancas Creek and disturbance to beaches and upland habitat outside of the work area.

The impact determination for the federally threatened white snowy plover is “may affect, but not likely to adversely affect,” which has received concurrence from the

USFWS. The Designated Critical Habitat for white snowy plover occurs within the project footprint. However, with approved avoidance and minimization measures, no take is expected to occur for white snowy plover. A monitor will survey for any potential nesting activity of white snowy plover. If any nesting or roosting birds are discovered, all activity must stop until all individual birds are gone. Birds must not be disturbed or encouraged to leave.

Possible impacts may occur to nesting and foraging behavior of riparian and wetland bird species due to construction noise and the proximity of construction activity during the bird nesting period of February 15 to September 1. During bird surveys, observations of foraging wetland bird species (i.e., snowy egrets and killdeer) indicate the wetland area upstream of the bridge provides foraging habitat. Additionally, the sandbar willow thicket provides nesting habitat for passerine warblers and other ground nesting birds (i.e., yellow warbler, yellowthroat warbler, and song sparrow). No wetland birds would be permanently impacted because potential foraging habitat is present in nearby (i.e., 1- to 4-mile range) coastal wetland areas. This foraging area is a very small wetland (less than 0.18 acre); thus, it provides only minimal foraging habitat. Normal foraging behavior would return as soon as the construction activity is completed.

During bird nesting season (February 15 to September 1), preconstruction bird nesting surveys would be conducted prior to any clearing and grubbing activity. If it is feasible within the project schedule and timing, clearing and grubbing activity would be performed during the non-bird nesting period (September 2 to February 14).

All equipment entering and exiting riparian and/or wetland areas must be washed down before and after daily operation to remove any potential nonnative or invasive seeds or soil that may contain invasive species.

2.19.14 Avoidance, Minimization, and/or Mitigation Measures

- CI-1** Runoff control measures shall be placed at the top of all excavation and embankment slopes.
- CI-2** Whenever possible, every effort shall be made to schedule work inside the Trancas Lagoon and earth-disturbing activities outside of anticipated rain events.
- CI-3** Slope protection/slope interruption devices shall be implemented on applicable slopes during the construction period. Wherever possible,

early implementation of permanent erosion control seeding or landscape planting shall be performed.

- CI-4** The Contractor shall provide and maintain stabilized construction site entrances and exits throughout.
- CI-5** Regular watering of non-paved sites along with regular street sweeping and vacuuming of paved surfaces
- CI-6** All slopes shall be protected with fiber rolls, silt fences, temporary slope drains, and early slope paving or landscaping as defined in the approved Storm Water Pollution Prevention Plan (SWPPP), especially during the rainy season from October 1 to May 1.
- CI-7** The total active disturbed soil area within the proposed project limits will be maintained to a minimum by focusing on construction activities that avoid earthwork and by implementing the approved construction site Best Management Practices (BMPs).
- CI-8** The contractor will be required to manage all stockpiles against wind and water erosion and contain concrete wastes with concrete washouts.
- CI-9** All catch basins and drainage inlets will include gravel bag berms or storm drain inlet protection.
- CI-10** For all construction equipment, fuels, and toxic chemical spills, prevention and spill control measures will be implemented throughout construction.
- CI-11** No heavy construction equipment shall be stored on the beach zone. All heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in a non-operating status.
- CI-12** A wash-out pan should be used to wash down any equipment that handles concrete or other chemical-based construction materials.
- CI-13** All construction activities are to occur between the hours of 6:00 a.m. and 9:00 p.m., and shall not exceed 86 A-weighted decibels (dBA) at a distance of 50 feet. No construction activity is expected to occur on

Sundays or on legal holidays. Construction noise will comply with the City of Malibu noise ordinance.

CI-14 During bird nesting season (February 15 to September 1), Pre-project Bird Nesting Surveys will be conducted prior to any clearing and grubbing activity. If feasible within the project's schedule and timing, perform clearing and grubbing activity during the non-bird nesting period (September 2 to February 14).

CI-15 All equipment entering and exiting riparian and/or wetland areas must be washed down before and after daily operation to remove any potential nonnative or invasive seeds or soil that may contain invasive species.

2.20 Cumulative Impacts

2.20.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitat and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR), Section 1508.7 of the Council on Environmental Quality (CEQ) Regulations.

2.20.2 Affected Environment

The intent of the proposed project is to provide the traveling public with a reliable and safe bridge structure on PCH at Trancas Creek that will facilitate travel within the City of Malibu. The project does not pose any potential for incursion into surrounding neighborhoods or undeveloped lands, or a geographic location that is conducive to influencing growth, whether resulting from physical constraints, planning and zoning factors, or local political considerations because it is not capacity increasing by design.

The circumstances of the proposed project's setting places certain limitations on potential new development that might occur adjacent to the proposed project site and

thereby contribute to cumulative impacts of the type that occur when multiple projects are located in nearby proximity. The general nature of areas surrounding the proposed project site and within the project study area is rural and coastal in nature and lightly developed. It is worth noting that growth and development trends in the project area are geared towards limiting growth to protect natural resources, avoid overburdening infrastructure that cannot be feasibly improved, and maintain the rural residential character of the surrounding community. Although the City of Malibu is characterized by vast amounts of vacant land, only a small portion is actually suitable for development due to various constraints (e.g., topographic, geologic, environmental). Consequently, these development trends and constraints prohibit significant growth throughout the project area and surrounding areas. Additionally, it is anticipated that growth and development will continue to occur within a larger regional context, which has the potential to affect conditions in the project study area. Therefore, to account for future development, future increases in growth within a regional context were incorporated into the assumption of the analysis of the proposed project's cumulative impacts.

Studies also identified six development projects within roughly 3 miles of the proposed project site that may not have been fully accounted for previously. These development projects are summarized in Table 2.30.

Four Caltrans improvement projects were also identified that may have the potential to contribute to localized cumulative impacts if the appropriate planning and implementation strategies are not deployed. Of the four projects, two would likely complete construction before commencement of construction of the proposed project, and close coordination would be required regarding the remaining two projects of concern to minimize short-term, cumulative effects that may result from consecutive work and construction activities. These Caltrans projects of concern are summarized in Table 2.31.

2.20.3 Environmental Consequences

Identification and definition of project-specific resources to consider in cumulative effects analyses is based on the degree of impact, ranging from none to significant. Resource topics where the proposed project could cause a potentially significant direct or indirect impact are included in the ensuing discussions. Resource topics where the proposed project has little-to-no potential to cause direct or indirect impacts and will not contribute to cumulative impacts on that resource are not evaluated.

Table 2.30 Development Projects of Concern in the Project Study Area

Name of Development	Lead Agency/ Jurisdiction	Proposed Use	Current Status	Approximate Distance from Project Area
Enhanced Watershed Management Program	City of Malibu	Development of an Enhanced Watershed Management Program (EWMP) for the North Santa Monica Bay Coastal Watersheds area, including a portion of the Malibu Creek Watershed within the City of Malibu limits.	As of August 2015, the project is under review by the Los Angeles Regional Water Quality Control Board.	Traverses through project limits
Point Dume Traffic Management Plan	City of Malibu	Development of a Traffic Management Plan for the Point Dume neighborhood area intended to recommend traffic safety features that will reduce vehicle speeds and improve safety for vehicles, pedestrians, and cyclists.	The City is conducting a survey for the development of the Point Dume Traffic Management Plan.	3 miles
FY 2015-2016 Street Maintenance Project	City of Malibu	Project work includes rubberized asphalt overlay, slurry seal, pavement repair, cold milling, demolition, traffic control, utility work, signage, traffic striping, and appurtenant work.	Construction substantially complete as of February 2016	2.5 miles
Malibu Middle & High School Improvements	Santa Monica-Malibu Unified School District	Implementation of a partial redevelopment program, including a net total of approximately 76,694 square feet (sf) of new construction (mostly replacement, as demolition of 15,041 sf of existing development would occur) and the renovation and/or upgrading of existing facilities and infrastructure.	Environmental Document certified on March 18, 2013.	1.5 miles
District 29 Creek Crossing Repair Project	County of Los Angeles Public Works	Repair corrosion damage to the District's water transmission main at eight creek crossing locations.	Design phase in progress. Construction anticipated in early 2018.	Traverses through project limits
Broad Beach Restoration Project	California State Lands Commission/ United States Army Corps of Engineers	Project consists of: (1) sand nourishment; (2) dune restoration; (3) sand backpassing (moving sand from wider reaches of the beach to narrower reaches of the beach when objective triggers are reached) designed to prolong nourishment; and (4) retaining the existing rock revetment seaward of certain Broad Beach properties as a permanent protective structure buried under both the restored beach and dune.	State environmental approval obtained. Federal environmental review and permit applications in progress.	Adjacent to project site

Table 2.31 Caltrans Projects of Concern in the Vicinity of the Proposed Project

Project EA	Route	Post Mile	Project Description	Construction Status/ Estimated Construction Date
33340	1	51.5/51.58	Slope and Soil Stabilization and Installation of Micro-Piles and Tie-Backs from North of Sea Vista Drive to Via Escondido Roadway	Design Phase Completed. Advertising to follow.
4Y670	1	46.9/62.9	Pavement Preservation between Malibu Lagoon and Los Angeles/Ventura County Line	In construction
27460	1	40.7/48.4	Adaptive Signal Control System from Topanga Canyon Road to John Tyler Drive	Programming/Planning Phase
29930	1	49.3/50.2	Replace Raised Median Island from Puerco Canyon Road to Approximately 0.5 mile north of Malibu Road	In Design Phase

Cumulative impacts on given resources are defined by the Resource Study Areas (RSAs). Each resource has a specific RSA that is delineated to include the project area as well as areas outside the project where the proposed project's activities, in combination with activities from other projects in the area, could contribute to cumulative impacts on the resource. Potential cumulative impacts on each resource are evaluated for both construction and operation of the proposed project. Because Alternatives 2 and 3 (build alternatives) for the proposed project are similar in geometry and project footprint, the build alternatives are considered to have similar cumulative impacts in this analysis.

2.20.3.1 Aesthetics

The proposed project is within the Coastal Zone, and there are views from the bridge to the Pacific Ocean and nearby coastal mountain peaks. The area is not considered a sensitive corridor with regard to visual resource issues. Furthermore, the MLCP (Section 6.3) designates PCH (SR-1) as a scenic road. However, SR-1 through the project limits is not a Designated State Scenic Highway and is not eligible for designation. Accordingly, the proposed project would not result in adverse impacts to the visual environment because the type of work proposed would not impact views to the beach, ocean, or nearby mountains. However, it is noted that visual resources would benefit from improved integration of the bridge into the natural environment through the use of design features that will help visually blend the structure into the natural surroundings. The proposed bridge would feature a more aesthetically pleasing design in order to facilitate blending, and bridge railings shall be approved by the California Coastal Commission for consistency with the MLCP.

In terms of other reasonably foreseeable actions that could add to a cumulative effect on visual resources within the RSA (i.e., view sheds surrounding the project site), the projects that were reviewed do not introduce new physical features or improvements that would individually contribute significant aesthetic impacts. Development projects reviewed can be characterized as actions to implement watershed protection policies, manage neighborhood traffic through traffic calming mechanisms, local beach nourishment, and upgrade existing public facilities and infrastructure (e.g., local street paving, schools, and water conveyance pipelines). In developing these projects, potential impacts on aesthetics and visual resources must also be addressed by each of the aforementioned projects of concern. When impacts are anticipated, avoidance, minimization, or mitigation measures are proposed to reduce the level of anticipated impacts to less than significant, where feasible. As a result, the actions reviewed are not anticipated to degrade existing views nor significantly decrease the

visual value for motorists and pedestrians. Thus, when considered within a cumulative context, these projects do not pose a cumulative aesthetic impact.

With regard to nearby Caltrans projects, work associated with these projects mainly consists of the following activities: slope and soil stabilization along PCH, pavement rehabilitation, intelligent transportation systems and traffic management, as well as minor operational improvements related to roadway safety (e.g., replacing existing median islands). Accordingly, these types of projects do not exhibit potential aesthetic impacts that would collectively degrade visual quality within the RSA. As a result, the aforementioned Caltrans projects would not negatively contribute to cumulative impacts on aesthetic resources and/or visual quality. Rather, these projects can include features to visually blend the project with the character of the surrounding visual environment, thereby avoiding or minimizing the potential for adverse cumulative effects.

2.20.3.2 Air Quality

Construction-related emissions from the proposed project in combination with the same emissions from any related projects or projects of concern in the RSA (i.e., South Coast Air Basin) that are occurring concurrently have the potential to create short-term, cumulative impacts to local air quality; however, these impacts would be temporary in nature and would be minimized by complying with SCAQMD rules and air quality management regulations during construction. Under CFR 93.123(c)(5), temporary increases in emissions are those occurring for no more than 5 years within a specific site. It is noted that the anticipated length of construction under Alternatives 2 and 3 is approximately 12 and 16 months, respectively. Moreover, the proposed project is not a capacity-increasing project and is limited to replacing an existing failing bridge structure subject to scour with a reliable and seismically safe replacement. As a result, there would be no increases in vehicle emissions during the project's operational phase that could lead to degradation of air quality.

In addition, related projects of concern within the RSA would not expose sensitive receptors to substantial localized pollutant concentrations, nor would they contribute to regional operational emissions that would cause exceedances of established SCAQMD threshold levels. Furthermore, related projects would not include operation of any land uses that routinely involve the use, storage, or processing of toxic air contaminants. Lastly, related projects are not anticipated to create objectionable odors that would affect a substantial number of people during construction or long-term operation. As such, these projects would not increase emissions or contribute to

worsening air quality; therefore, these projects would not cause cumulative impacts to air quality.

2.20.3.3 Biological Environment

Because the project is located in close proximity to Trancas Creek (including the stream mouth) and Trancas Lagoon, potential impacts to biological resources are anticipated as a result of project implementation, as discussed in the Biological Environment sections of this document.

In terms of potential effects on species that are identified in local, regional, State, or federal plans, policies, or regulations, one species (western snowy plover) was observed foraging on the beach near the mouth of Trancas Creek during biological surveys. As a result, coordination between Caltrans and the USFWS was initiated via the informal Section 7 consultation process. The results of that coordination were a “may affect, not likely to adversely affect” determination that was issued on March 2, 2017. The determination included measures that will be implemented to avoid or minimize potential harm to this species as a result of the proposed project. Measures will also be implemented to reduce potential impacts to migratory birds that may occur in the vicinity of the project. With these measures in place, projects impacts are anticipated to be minimal and less than significant.

With regard to potential effects on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS, the proposed project would result in up to approximately 1.15 acres of temporary impacts and 0.12 acre of permanent impacts to riparian and coastal lagoon resources. However, restoration and compensatory mitigation would be undertaken pursuant to the conditions of the regulatory permits that will be obtained for the project during the design phase. As such, impacts to adjacent habitat would be less than significant with adherence to regulatory permits.

Potential impacts on federally protected wetlands as defined by Section 404 of the CWA through direct removal, filling, hydrological interruption, or other means are anticipated. The proposed project would result in up to approximately 0.18 acre of temporary impacts and 0.12 acre of permanent impacts to federal wetlands. As such, restoration and compensatory mitigation would be undertaken in accordance with the conditions included in the regulatory permits that will be obtained for the project during the design phase.

In addition, potential impacts related to conflict between the proposed project and local policies or ordinances protecting biological resources are also anticipated. Trancas Creek and Trancas Lagoon both meet the definition of an ESHA as identified in the MLCP. This designation is intended to protect these resources from “significant disruption of habitat values.” However, it is noted that Trancas Creek and Trancas Lagoon have been heavily disturbed and degraded, thereby resulting in a reduction in habitat value. Nevertheless, the proposed project would affect a small portion of these resources, and restoration and enhancement will be implemented pursuant to regulatory permits. The project may also allow for the facilitation of a lagoon restoration project in the future, which is currently being studied by the RCD-SMM. However, at the time of preparation of this draft document, there is no financially constrained project planned to implement such lagoon restoration efforts.

Although the proposed project would have potential impacts on biological resources, including habitat and wetland resources, such impacts would be addressed through the various avoidance, minimization, and mitigation measures included in the Biological Environment sections of this document, in addition to permit conditions requiring habitat and wetlands restoration through compensatory mitigation. Such permits will be obtained during the design phase, when more detailed engineering data are available. As a result, the proposed project is not anticipated to produce direct or indirect significant impacts to biological resources and thus would not contribute to a cumulative effect on such resources.

Nearby development projects of concern are assumed to address potential impacts to biological resources through avoidance, minimization, and mitigation measures of their own in addition to any conditions that may be required by regulatory permits issued for those projects. Several of the projects that were reviewed near the proposed project’s location do not demonstrate the potential to produce significant impacts to biological resources because their scopes are limited to traffic management, roadway maintenance, and reconstruction of educational facilities. Other projects that were reviewed as part of this analysis are anticipated to provide direct and indirect benefits to biological resources because they intend to formulate and implement policies and projects related to watershed management enhancement, water conveyance (i.e., repairing corrosion damage to the Waterworks District transmission main), and local beach nourishment to reverse natural geologic coastal erosion.

Moreover, nearby Caltrans projects would also be subject to the same requirements of the proposed project, including avoidance and minimization measures, and if

necessary, mitigation measures to address potentially significant impacts, and obtaining regulatory permits when required by State or federal regulations. Also, three of the four Caltrans projects that are in close proximity to the proposed project site focus on maintenance improvements (e.g., delivering necessary pavement rehabilitation on PCH and on Intelligent Transportation System [ITS] traffic signal upgrades) and operational improvements related to roadway safety (i.e., replacing raised median islands). Other projects are intended to address isolated potential slope and cliff failures above the PCH roadway and are not anticipated to produce significant impacts to biological resources. Therefore, these projects would not contribute to a cumulative impact that would negatively affect biological resources.

2.20.3.4 Geology/Soils/Seismic/Topography

The nature of the proposed project site is a lightly developed, rural-like, coastal setting, and the proposed project is not expected to pose any adverse impacts to any natural or unique geologic landmarks or landforms. Furthermore, there are no existing geologic conditions that would pose significant limitations on development so long as they are addressed through common design and engineering processes and practices, including adherence with seismic design criteria. There are no projects adjacent to the proposed project site that would contribute to any adverse cumulative effect on public and/or property safety or local geologic conditions. It is noted that the Broad Beach Nourishment Project, located adjacent to the project site, proposes to implement a long-term shoreline protection plan to restore Broad Beach, which would be a direct benefit to coastal geologic conditions. Long term, this project would contribute to geologic benefits by minimizing coastal erosion issues at Broad Beach.

2.20.3.5 Hazardous Waste/Materials

The proposed project's operations would not involve the use of hazardous materials and would not have impacts with regard to hazardous waste. Therefore, proposed project operations would not contribute to cumulative effects regarding hazardous wastes or materials.

During construction, hazardous contaminants may be encountered in soils/groundwater in associated and adjacent properties, and in areas adjacent to the roadway mainline, which would be addressed through soil testing and standard avoidance and minimization measures to reduce potential project and cumulative impacts. Soil/groundwater contamination related to associated/adjacent properties would be due to the nature and previous use of those sites, and remediation would occur to reduce the potential and cumulative impacts of such.

In addition, nearby projects of concern could encounter similar conditions during construction, including RECs found on respective project sites. As with the proposed project, it is standard practice to conduct site investigations to survey project sites for hazardous materials prior to construction, and if RECs are found, additional investigation and abatement is typically completed. Moreover, avoidance, minimization, and mitigation measures may be formulated to address hazardous waste issues that may impact the project site and/or surrounding environment. Thus, construction of these nearby projects of concern would not contribute to cumulative effects related to hazardous waste and materials.

With regard to operational impacts, related projects propose uses that do not involve any materials that would entail the use of hazardous materials that could potentially pose a threat to persons on site or on immediately adjacent properties. Accordingly, cumulative impacts related to hazardous waste and materials are not anticipated as a result of related project operations.

2.20.3.6 Noise and Vibration

During project construction, temporary increases in ambient exterior noise levels are anticipated on a short-term and intermittent basis throughout the project site and immediately adjacent areas due to the use of construction equipment. Therefore, any increase in noise would be a direct result of construction activities. However, this would be temporary and would only occur during daytime hours (typically from 7:00 a.m. to 7:00 p.m. during weekdays). Moreover, the nearest noise sensitive receptor is about 0.25 mile away from the project site, and with adherence to applicable Caltrans and local construction-related noise standards, the project would not contribute individual noise impacts that would contribute to a cumulative effect on noise. Therefore, there would be no cumulative impacts related to noise during project construction. In terms of nearby projects of concern, these projects would also be subject to local noise standards, while Caltrans projects would also be required to adhere to agency noise provisions during construction. As a result, increases in construction noise that would collectively contribute to cumulative impacts on noise are not anticipated.

The proposed project is intended to replace an existing bridge structure that will consist of the same number of travel lanes (i.e., two in each direction), and would thus add no vehicle capacity. As a result, a significant increase in noise due to project operations is not anticipated because there will be no increase in vehicle capacity. Traffic characteristics at PCH and Trancas Creek would not be substantially altered

from current conditions. As such, the proposed project would not produce a permanent increase in ambient noise levels and would not result in significant noise impacts that could affect the surrounding environment or contribute to a cumulative noise impact.

Additionally, operations associated with the aforementioned projects of concern do not involve activities or land uses that would directly produce a significant increase in ambient noise levels. None of these projects are intended to facilitate increases in stationary or mobile noise sources, and none would result in significant noise impacts during their operational phase. Related Caltrans projects of concern would not add vehicle capacity; therefore, there would be no significant increases in traffic noise. Collectively, these projects of concern are not anticipated to contribute to cumulative noise impacts.

2.20.3.7 Traffic and Transportation/Bicycle Facilities

Construction of the proposed project would likely have short-term effects on traffic and accessibility, particularly with the temporary reduction of travel lanes from four to two total lanes (one lane in each direction) and construction in the vicinity of the proposed project. Moreover, there are no viable alternate roads that can be used for detours in this area. As such, this could result in a temporary minimal increase in traffic and delays for motorists, including emergency service vehicles, traveling through the project site. However, these effects would be minimized through a construction staging program and a Traffic Management Plan (TMP) to be implemented during construction. Depending on selection of the preferred alternative, the approximate duration of these temporary, construction-related effects would be 12 to 16 months.

It is assumed that nearby projects of concern would also implement similar methods to minimize temporary traffic impacts during construction, including construction phasing and TMPs, if necessary, to address short-term, construction-related impacts. If such projects are in construction during the same period as the proposed project, coordination between project proponents would be initiated to ensure that construction-related traffic impacts are not compounded by multiple projects being in construction at the same time. Any cumulative, construction-related effects on traffic and facilities would be short term and temporary in nature, and less than significant with implementation of the aforementioned plans and procedures. Therefore, there would be no long-term negative cumulative impact to traffic and transportation facilities.

In addition, the proposed project would not adversely affect any existing or planned bicycle facilities and would not contribute to cumulative effects on such. It is noted that the secondary purpose of the proposed project is to provide and promote multi-modal travel on PCH. As such, in addition to standard lanes and shoulders, the proposed bridge will include a 14-foot-wide southbound shoulder that will provide room for bicycle/pedestrian use and would be a direct benefit for multi-modal travel in the vicinity of the proposed project.

2.20.3.8 Water Quality and Storm Water Run-Off

The proposed project, as well as other related projects, would be required to comply with Los Angeles County Department of Public Works guidelines for drainage, and would require the development and implementation of a WPCP or SWPPP that specifies water quality and storm water BMPs that will reduce pollution in storm water discharges. Implementation of these procedures would minimize potential impacts on water quality and would avoid significant cumulative effects.

2.20.4 Avoidance, Minimization, and/or Mitigation Measures

The proposed project is intended to replace the existing Trancas Creek Bridge with a new bridge structure that maintains safe and reliable access for the public and allows for safer multi-modal transportation on PCH. The project is not anticipated to contribute to any adverse, cumulative effects that would be detrimental to the aforementioned resources. Therefore, no avoidance, minimization, and/or mitigation measures are proposed for cumulative impacts. It is noted that measures are proposed for each individual resource to address potential impacts on such resource, and are discussed throughout the Environmental Consequences subsections of each resource.

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2.21 Climate Change under CEQA

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gases (GHGs), particularly those generated from the production and use of fossil fuels.

2.21.1 Regulatory Setting

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization's in 1988, has led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs related to human activity that include carbon dioxide (CO₂), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (1, 1, 1, 2-tetrafluoroethane), and HFC-152a (difluoroethane).

In the U.S., the main source of GHG emissions is electricity generation, followed by transportation. In California, however, transportation sources (including passenger cars, light-duty trucks, other trucks, buses, and motorcycles make up the largest source of GHG-emitting sources. The dominant GHG emitted is CO₂, mostly from fossil fuel combustion.

There are typically two terms used when discussing the impacts of climate change. "Greenhouse Gas (GHG) Mitigation" is a term for reducing GHG emissions in order to reduce or "mitigate" the impacts of climate change. "Adaptation," refers to the effort of planning for and adapting to impacts due to climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels).

There are four primary strategies for reducing GHG emissions from transportation sources: 1) improve system and operation efficiencies, 2) reduce growth of vehicle miles traveled (VMT), 3) transition to lower GHG fuels, and 4) improve vehicle technologies. To be most effective all four should be pursued collectively.

2.21.1.1 State

With the passage of several pieces of legislation including State Senate and Assembly bills and Executive Orders, California launched an innovative and proactive approach to dealing with GHG emissions and climate change.

- **Assembly Bill 1493 (AB 1493), Pavley, Vehicular Emissions:** Greenhouse Gases, 2002: This bill requires the California Air Resources Board (ARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year.
- **Executive Order (EO) S-3-05 (June 1, 2005):** The goal of this EO is to reduce California's GHG emissions to 1) year 2000 levels by 2010, 2) year 1990 levels by 2020, and 3) 80 percent below the year 1990 levels by 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32.
- **Assembly Bill 32 (AB 32), Núñez and Pavley, The Global Warming Solutions Act of 2006:** AB 32 sets the same overall GHG emissions reduction goals as outlined in EO S-3-05, while further mandating that ARB create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases."
- **Executive Order S-20-06 (October 18, 2006):** This order establishes the responsibilities and roles of the Secretary of the California Environmental Protection Agency (Cal/EPA) and state agencies with regard to climate change.
- **Executive Order S-01-07 (January 18, 2007):** This order set forth the low carbon fuel standard for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.
- **Senate Bill 97 (SB 97) Chapter 185, 2007, Greenhouse Gas Emissions:** This bill required the Governor's Office of Planning and Research (OPR) to develop recommended amendments to the California Environmental Quality Act (CEQA) Guidelines for addressing GHG emissions. The amendments became effective on March 18, 2010.
- **Senate Bill 375 (SB 375), Chapter 728, 2008, Sustainable Communities and Climate Protection:** This bill requires the California Air Resources Board (CARB) to set regional emissions reduction targets from passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan for the achievement of the emissions target for their region.
- **Senate Bill 391 (SB 391) Chapter 585, 2009 California Transportation Plan:** This bill requires the State's long-range transportation plan to meet California's climate change goals under AB 32.

2.21.1.2 Federal

Although climate change and GHG reduction are a concern at the federal level, currently no regulations or legislation have been enacted specifically addressing GHG emissions reductions and climate change at the project level. Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level GHG analysis.¹ FHWA supports the approach that climate change considerations should be integrated throughout the transportation decision-making process—from planning through project development and delivery. Addressing climate change mitigation and adaptation up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making. Climate change considerations can be integrated into many planning factors, such as supporting economic vitality and global efficiency, increasing safety and mobility, enhancing the environment, promoting energy conservation, and improving the quality of life.

The four strategies outlined by FHWA to lessen climate change impacts correlate with efforts that the state is undertaking to deal with transportation and climate change; these strategies include improved transportation system efficiency, cleaner fuels, cleaner vehicles, and a reduction in travel activity.

Climate change and its associated effects are also being addressed through various efforts at the federal level to improve fuel economy and energy efficiency, such as the “National Clean Car Program” and EO 13514 - Federal Leadership in Environmental, Energy and Economic Performance.

Executive Order 13514 (October 5, 2009): This order is focused on reducing greenhouse gases internally in federal agency missions, programs and operations, but also directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

U.S. EPA’s authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet

¹ To date, no national standards have been established regarding mobile source GHGs, nor has U.S. EPA established any ambient standards, criteria or thresholds for GHGs resulting from mobile sources.

the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court's ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six greenhouse gases constitute a threat to public health and welfare. Thus, it is the Supreme Court's interpretation of the existing Act and EPA's assessment of the scientific evidence that form the basis for EPA's regulatory actions. U.S. EPA in conjunction with NHTSA issued the first of a series of GHG emission standards for new cars and light-duty vehicles in April 2010.¹

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations.

The final combined standards that made up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards implemented by this program are expected to reduce GHG emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016).

On August 28, 2012, U.S. EPA and NHTSA issued a joint Final Rulemaking to extend the National Program for fuel economy standards to model year 2017 through 2025 passenger vehicles. Over the lifetime of the model year 2017-2025 standards this program is projected to save approximately four billion barrels of oil and two billion metric tons of GHG emissions.

The complementary U.S. EPA and NHTSA standards that make up the Heavy-Duty National Program apply to combination tractors (semi-trucks), heavy-duty pickup trucks and vans, and vocational vehicles (including buses and refuse or utility trucks). Together, these standards will cut greenhouse gas emissions and domestic oil use significantly. This program responds to President Barack Obama's 2010 request to jointly establish greenhouse gas emissions and fuel efficiency standards for the

¹ <http://www.c2es.org/federal/executive/epa/greenhouse-gas-regulation-faq>.

medium- and heavy-duty highway vehicle sector. The agencies estimate that the combined standards will reduce CO₂ emissions by about 270 million metric tons and save about 530 million barrels of oil over the life of model year 2014 to 2018 heavy duty vehicles.

2.21.2 Climate Change Effects

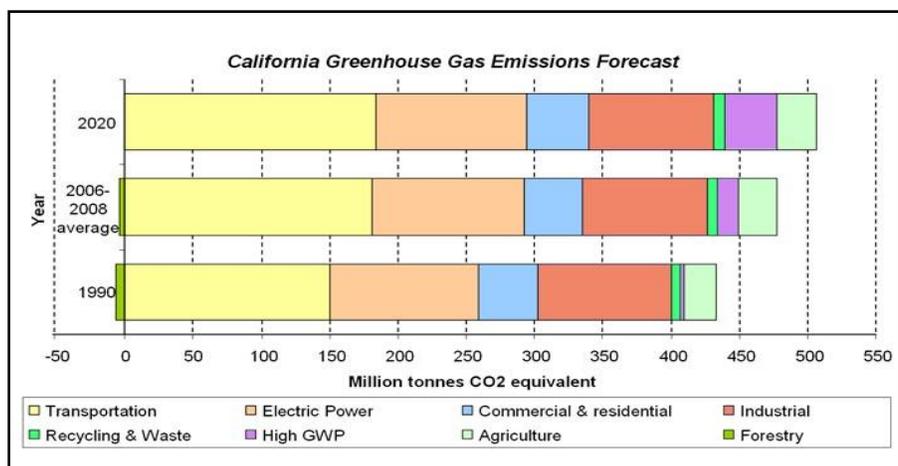
This section summarizes methodology; conclusions of the climate change analysis; potential climate change impacts that could result from implementation of the proposed project; and avoidance, minimization and/or mitigation measures to reduce these impacts.

2.21.2.1 Assessment Methodology

An individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (see CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

The AB 32 Scoping Plan contains the main strategies California will use to reduce GHG. As part of its supporting documentation for the Draft Scoping Plan, the ARB released the GHG inventory for California (Forecast last updated: 28 October 2010). The forecast, summarized on Figure 2-33, is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.

According to the Association of Environmental Professionals (AEP), in its paper titled *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*, "an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of greenhouse gases."



Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Figure 2-33 California Greenhouse Gas Forecast

The project improvements will replace the bridge with a new structure that has the same number of lanes; there will be no increase in capacity. The wider shoulder and safer bike lane may entice people to bike/walk instead of drive and may result in a very small reduction in the number of vehicles on the road. The project will therefore have no effect, or a slightly beneficial effect, on GHG emissions from transportation sources.

Construction Emissions

Greenhouse gas emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase. The frequency and occurrence of these emissions can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved TMPs, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

Greenhouse Gas Reduction Strategies

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement Executive Orders S-3-05 and S-01-07 and help achieve the

targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from then-Governor Arnold Schwarzenegger's Strategic Growth Plan for California. The Strategic Growth Plan targeted a significant decrease in traffic congestion below 2008 levels and a corresponding reduction in GHG emissions, while accommodating growth in population and the economy. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements as shown in Figure 2-34, Mobility Pyramid.



Figure 2-34 Mobility Pyramid

Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high-density housing along transit corridors. Caltrans works closely with local jurisdictions on planning activities, but does not have local land use planning authority. Caltrans assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; Caltrans is doing this by supporting ongoing research efforts at universities, by supporting legislative efforts to increase fuel economy, and by participating on the Climate Action Team. It is important to note, however, that control of fuel economy standards is held by the U.S. EPA and ARB.

Caltrans is also working towards enhancing the State's transportation planning process to respond to future challenges. Similar to requirements for regional transportation plans under Senate Bill (SB) 375 (Steinberg 2008), SB 391 (Liu 2009)

requires the State's long-range transportation plan to meet California's climate change goals under Assembly Bill (AB) 32.

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas (GHG) emissions. The CTP defines performance-based goals, policies, and strategies to achieve our collective vision for California's future, statewide, integrated, multimodal transportation system.

The purpose of the CTP is to provide a common policy framework that will guide transportation investments and decisions by all levels of government, the private sector, and other transportation stakeholders. Through this policy framework, the CTP 2040 will identify the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the State's transportation needs.

Table 2.32 summarizes the Departmental and statewide efforts that Caltrans is implementing to reduce GHG emissions. More detailed information about each strategy is included in the Climate Action Program at Caltrans (December 2006).

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

Caltrans Activities to Address Climate Change (April 2013) provides a comprehensive overview of activities undertaken by Caltrans statewide to reduce greenhouse gas emissions resulting from agency operations.

According to Caltrans Standard Specifications, the contractor must comply with all of the local AQMD rules, ordinances, and regulations regarding air quality restrictions including, but not limited to, the SCAQMD's Rules 401, 402, and 403.

Adaptation Strategies

"Adaptation strategies" refer to how Caltrans and others can plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damage to roadbeds

Table 2.32 Climate Change Reduction Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO ₂ Savings Million Metric Tons (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Transportation System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	0.07	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, ARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.045 0.0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	0.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix	1.2	4.2
				25% fly ash cement mix > 50% fly ash/slag mix	0.36	3.6
Goods Movement	Office of Goods Movement	Cal EPA, ARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.18

from longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

At the federal level, the Climate Change Adaptation Task Force, co-chaired by the White House Council on Environmental Quality (CEQ), the Office of Science and Technology Policy (OSTP), and the National Oceanic and Atmospheric Administration (NOAA), released its interagency task force progress report on October 28, 2011, outlining the federal government's progress in expanding and

strengthening the Nation's capacity to better understand, prepare for, and respond to extreme events and other climate change impacts. The report provides an update on actions in key areas of federal adaptation, including: building resilience in local communities, safeguarding critical natural resources such as freshwater, and providing accessible climate information and tools to help decision-makers manage climate risks.

Climate change adaptation must also involve the natural environment as well. Efforts are underway on a statewide-level to develop strategies to cope with impacts to habitat and biodiversity through planning and conservation. The results of these efforts will help California agencies plan and implement mitigation strategies for programs and projects.

On November 14, 2008, then-Governor Arnold Schwarzenegger signed EO S-13-08, which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

In addition to addressing projected sea level rise, the California Natural Resources Agency (Resources Agency) was directed to coordinate with local, regional, state and federal public and private entities to develop The California Climate Adaptation Strategy (Dec 2009), which summarizes the best-known science on climate change impacts to California, assesses California's vulnerability to the identified impacts, and then outlines solutions that can be implemented within and across state agencies to promote resiliency.

The strategy outline is in direct response to EO S-13-08 that specifically asked the Resources Agency to identify how state agencies can respond to rising temperatures, changing precipitation patterns, sea level rise, and extreme natural events. Numerous other state agencies were involved in the creation of the Adaptation Strategy document, including the California Environmental Protection Agency; Business, Transportation and Housing; Health and Human Services; and the Department of Agriculture. The document is broken down into strategies for different sectors that include: Public Health; Biodiversity and Habitat; Ocean and Coastal Resources; Water Management; Agriculture; Forestry; and Transportation and Energy Infrastructure. As data continues to be developed and collected, the state's adaptation strategy will be updated to reflect current findings.

The National Academy of Science was directed to prepare a Sea Level Rise Assessment Report¹ to recommend how California should plan for future sea level rise. The report was released in June 2012 and included:

- Relative sea level rise projections for California, Oregon and Washington taking into account coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge and land subsidence rates.
- The range of uncertainty in selected sea level rise projections.
- A synthesis of existing information on projected sea level rise impacts to state infrastructure (such as roads, public facilities and beaches), natural areas, and coastal and marine ecosystems.
- A discussion of future research needs regarding sea level rise.

In 2010, interim guidance was released by The Coastal Ocean Climate Action Team (CO-CAT) as well as Caltrans as a method to initiate action and discussion of potential risks to the states infrastructure due to projected sea level rise. Subsequently, CO-CAT updated the Sea Level Rise guidance to include information presented in the National Academies Study.

All state agencies that are planning to construct projects in areas vulnerable to future sea level rise are directed to consider a range of sea level rise scenarios for the years 2050 and 2100 to assess project vulnerability and, to the extent feasible, reduce expected risks and increase resiliency to sea level rise. Sea level rise estimates should also be used in conjunction with information on local uplift and subsidence, coastal erosion rates, predicted higher high water levels, storm surge and storm wave data.

All projects that have filed a Notice of Preparation (NOP) as of the date of EO S-13-08, and/or are programmed for construction funding from 2008 through 2013, or are routine maintenance projects may, but are not required to, consider these planning guidelines.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance and operational improvements of the system,

¹ Sea Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future (2012) is available at http://www.nap.edu/catalog.php?record_id=13389.

and economy of the state. Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, Caltrans will be able review its current design standards to determine what changes, if any, may be needed to protect the transportation system from sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. Caltrans is an active participant in the efforts being conducted in response to EO S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

Chapter 3 Comments and Coordination

3.1 Introduction

Early and continual coordination with the general public and public agencies is an essential part of the environmental process. This coordination allows planners to determine the necessary scope of environmental documentation and the level of analysis required. In addition, it helps identify potential impacts avoidance, minimization, and/or mitigation measures that relate to environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, a public outreach program, and interagency coordination meetings and communication. This chapter summarizes the results of the California Department of Transportation's (Caltrans) efforts to fully identify, address, and resolve project-related issues through early and continued coordination.

3.1.1 Interagency Consultation and Coordination

The Resource Conservation District of the Santa Monica Mountains (RCD-SMM) is a local organization that provides environmental education, habitat restoration, and landowner assistance. The Caltrans PDT was in close coordination and contact with the RCD-SMM throughout project development in an attempt to assist the RCD-SMM in its goal of restoring the Trancas Creek Lagoon to "Historic Conditions". Pursuant to this goal, a longer bridge design was added as a build alternative in order to provide proper tidal flow for the future restored lagoon, increase critical habitat, and help reverse the decline of California's federally endangered southern steelhead trout. The RCD-SMM also assisted Caltrans with community outreach efforts during the public scoping meeting.

Consultation with the National Oceanic and Atmospheric Administration (NOAA) was completed on January 21, 2015, with a concurrence letter from the Long Beach office stating that no endangered steelhead trout are known to occur in Trancas Creek. The letter also concurred that Trancas Creek is not designated critical habitat for steelhead trout.

On January 26, 2017, a site visitation was organized with the Caltrans PDT and Los Angeles County of Beaches and Harbors to discuss the placement of utility poles. The removal of parking at the Zuma Beach parking lot was required for relocation of utilities as a part of the scope for the proposed project. Acquisition of a portion of the

parking lot was proposed and would result in the removal of about 70 parking spaces for Zuma Beach. The site visitation was used to identify alternative options that would avoid Caltrans acquisition of the parking lot and reduce parking impacts. Following the site visitation, coordination in February 2017 resulted in the decision to implement an alternative that eliminates the need to remove any parking from the Zuma Beach parking lot.

Coordination with the City of Malibu began on January 12, 2017, in order to determine its build alternative preference. The City of Malibu stated the long bridge alternative was preferred due to its potential for habitat restoration.

Informal Section 7 consultation was initiated with the United States Fish and Wildlife Service (USFWS) on February 11, 2015, regarding potential impacts to listed species and critical habitat. It was completed on March 2, 2017, with a concurrence letter from the Ventura office stating that with approved avoidance and minimization measures, no take is expected to occur for western snowy plovers.

Coordination with the NOAA National Marine Fisheries Service (NOAA Fisheries Service) was initiated on January 8, 2015 with a request for a list of threatened and endangered species under their jurisdiction. The NOAA Fisheries Service responded with a list on January 21, 2015, but indicated that no listed species under its jurisdiction were expected to be present. This was confirmed with a follow-up correspondence on March 8, 2017.

Caltrans biologists met with personnel from the United States Army Corps of Engineers (USACE) and California Department of Fish and Wildlife (CDFW) to discuss potential impacts to jurisdictional waters on July 26, 2016. A wetland delineation was performed using methods outlined in the USACE Wetlands Delineation Manual.

The following resource agency permits are required to mitigate for impacts to jurisdictional wetland and riparian habitat: 401 Permit (Nationwide Permit 33), 1600 Permit (Streambed Alteration Agreement), and 404 Permit (Water Pollution Control; Clean Water Act).

3.1.2 Scoping

Scoping is a process designed to examine a proposed project early in the environmental impact analysis and review process. Scoping is intended to identify the range of issues raised by the proposed project and resolve the concerns of other

agencies and the general public. Gathering public input is essential for conducting scoping. A Scoping Summary Report (May 2016) was prepared for this project and is summarized below.

An informal scoping meeting took place from 6:00 p.m. to 8:00 p.m. January 27, 2016, at the Malibu West Beach Club at 30756 Pacific Coast Highway in Malibu. The meeting was attended by structural engineers from Caltrans Headquarters, the Caltrans Project Management Division, and the Environmental Planning Division. The meeting was held open house style with various project maps and exhibit boards displayed around the room. Caltrans Senior Environmental Planner Karl Price presented a PowerPoint presentation that gave an overview of the project, project alternatives, the environmental review process, project schedule, and ways to submit comments. Attendees were given the opportunity to provide verbal comments and ask questions. Attendees could submit written comments on comment cards that were distributed in the meeting. Project information handouts were also distributed in the meeting to provide general facts on the project. Members of the Caltrans PDT were available to answer questions and provide contact information for inquiries on the project updates.

Notification of the scoping meeting was made available through newspaper advertisements, scoping notices mailed to community members, and scoping letters to elected officials. The newspaper advertisement was printed in the *Malibu Surfside News* on January 13, 2016, and the *Malibu Times* on January 14, 2016. The *Malibu Surfside News* is a weekly newspaper published Thursdays, with a circulation of approximately 13,500. The *Malibu Times* is a weekly newspaper with a circulation of approximately 12,000. Scoping notices describing the project proposal and public scoping meeting were sent to about 350 residents and property owners within a 0.5-mile radius of the project site on January 6, 2016. The RCD-SMM also sent electronic notices to additional homeowners and leaders of homeowners' associations.

Scoping letters were sent to appropriate federal, State, and local elected officials, agencies, and local interest groups on January 8, 2016. The scoping letters were used to notify them of the proposed project and the upcoming public scoping meeting. Everyone who received some sort of notification on the project were encouraged to attend the meeting to learn more about the project and deliver any concerns, comments, or questions they may have.

Comments were received from the public through the United States Mail and e-mail during the scoping comment period, which opened on January 27, 2016, and closed on February 27, 2016. Verbal comments from the scoping meeting were recorded and transcribed. A total of 46 comments were received from government agencies, businesses, local organizations, individuals from the public, and oral testimonies.

The topics of concern for the build alternatives that were mentioned in the comments were:

- Factors to consider for the build alternatives in respect to budget, fewer construction impacts, longer bridge lifespans, environmental impacts, hydrology, safety, and impacts to surrounding communities
- Availability of a walk-through tour for the community members
- Construction impacts due to the project's lengthy duration, and traffic management and utility impacts
- Considerations for a pedestrian walkway and a possible bicycle path
- Environmental preservation, impacts to endangered species, and the potential for environmental restoration
- Possibility of bridge rehabilitation and use of riprap
- Interagency coordination and interagency regulations that must be considered in the design and construction phases
- Cumulative impacts from other projects in the area
- Preserving the community's integrity and impacts to surrounding businesses

3.2 Section 4(f) Public Noticing

A 4(f) only commenting period was conducted from March 9, 2017, to March 25, 2017. During this time, 18 public notices were posted around the Zuma County Beach Facilities. Any comments received from Los Angeles County Beach and Harbors and from the public are being considered and revisions will be made as appropriate. An email was also sent on March 15, 2017, to scoping meeting participants who left their contact information with Caltrans.

3.3 Public Meeting Noticing

The following public outreach activities were conducted for the project:

- **General Public Noticing**
 - Newspaper advertisements about the project proposal and scoping meeting were placed in the *Malibu Surfside News* on January 13, 2016, and the *Malibu Times* on January 14, 2016.
 - Postcard notices about the project proposal and public scoping meeting were sent to about 350 addresses on January 6, 2016. The mailing included residents and property owners within a 0.5-mile radius of the project site. In addition, electronic notices were distributed by the local interest group, RCD-SMM.
 - A project website was set up at <http://www.dot.ca.gov/dist07/travel/projects/trancas/>. The website includes the scoping meeting materials and project information.

- **Elected Officials, Agencies, and Local Interest Group Noticing**
 - Scoping letters were sent on January 8, 2016, to appropriate federal, State, and local elected officials, agencies, and local interest groups notifying them about the proposed project and the planned public scoping meeting.

The scoping notices, sample letters, and a list of agencies and elected officials notified about the project and invited to attend the scoping meeting are included in Appendix I.

3.4 Draft Environmental Document Circulation

The Draft IS/EA was made available for public review for 46 days, between April 21, 2017 and June 5, 2017. Information about the project and the environmental document were made available in several ways:

- A combined Notice of Availability and Notice of Public Hearing that was sent to government agencies, organizations, elected officials, and other interested parties on May 2, 2017. A CD containing the document was included.
- The document was posted online at the Caltrans District 7 website (<http://www.dot.ca.gov/d7/env-docs/>).
- A hard copy of the document was made available at the following locations:
 - Malibu City Library (23519 West Civic Center Way, Malibu, CA 90265).
 - Malibu City Hall (23825 Stuart Ranch Rd, Malibu, CA 90265).
 - Caltrans District 7 office (100 S. Main St., Ste. 100, Los Angeles, CA 90012).

- A joint Notice of Availability and Notice of Public Hearing was published in two local newspapers, the Malibu Surfside News (published May 17, 2017) and the Malibu Times (published May 18, 2017).
- Postcards were sent to approximately 673 stakeholders (property owners, businesses and residents) within 500 feet of the project area to notify them of the upcoming public hearing. The postcards were mailed out two weeks prior to the public hearing.
- A public hearing was held at the Malibu West Beach Club (30756 Pacific Coast Highway) from 6:00pm to 8:00pm on May 25, 2017.

Copies of the newspaper ads, postcards and sample letters are included in Appendix I.

3.5 Public Comments

Comments were received from the public through the U.S. Mail and e-mail during the public comment period (April 21, 2017 through June 5, 2017) and via oral and written comments at the public hearing on May 25, 2015. The comments, along with responses, are included in Appendix J. The text of this document has been modified to address these comments, where appropriate.

Chapter 4 List of Preparers

Ronald Kosinski, Deputy District Director. B.A. Geography, California State University, Long Beach; Masters in Urban Planning, California State Polytechnic University, Pomona; 40 years of environmental planning experience. Contribution: Management, including analysis, document editing, and approval

Karl Price, Senior Environmental Planner. B.S. Biology, California State Polytechnic University, Pomona; 20 years of environmental planning experience. Contribution: Environmental project management, preparation and review of environmental document

Christine Lan, Associate Environmental Planner. B.S. Environmental Policy Analysis and Planning and B.A. Political Science, University of California, Davis; M.S. Transportation Management, San Jose State University; 5 years of experience in environmental document preparation and experience assisting with biological field surveys. Contribution: Environmental document lead preparer and oversight, coordinator of public meetings and interagency contact

Paul Caron, Senior District Biologist. B.S. Environmental and Systematic Biology, California Polytechnic State University, San Luis Obispo; 23 years of experience in biological surveys, biological technical reports, and ecological restoration; 11 of those years as a supervisor of biologists. Contribution: Review of Natural Environment Study

Eric Dietrich, Associate Environmental Planner. B.S. Geography, University of Colorado, Boulder; M.A. Urban Planning, Tufts University; 11 years of experience in environmental document preparation and urban planning. Contributions: Produced public scoping mailing list

Kelly Ewing-Toledo, Senior District Environmental Planner, Cultural Resources Unit. B.A. History, California State University, Sacramento; M.A. History/Public History, California State University, Fullerton; 16 years of experience in cultural resources management with focus on the built environment; Professionally Qualified Staff (PQS)–Principal Architectural Historian; District Heritage Resources Coordinator; 3 years as Supervising Environmental Planner of archaeologist and historians. Contribution:

Oversight and review of Historic Property Survey Report (HPSR), and Archaeological Survey Report (ASR)

Caprice “Kip” Harper, Associate Environmental Planner. B.A. and M.A. Anthropology, California State University, Los Angeles; and Graduate Certificate in Heritage Resource Planning, University of Victoria, B.C.; 18 years of experience in cultural resources management/historic preservation planning; PQS Principal Investigator–Prehistoric Archaeology and PQS Architectural History. Contribution: Prepared Area of Potential Effects Map, HPSR, and ASR

Joseph Kibe, Senior Transportation Engineer. B.S. Civil Engineering, California State University, Long Beach; 17 years of experience in transportation engineering. Contribution: Preparation and review of Transportation Engineering Performance Assessment

Alex Kirkish, Associate Environmental Planner (Archaeologist). B.A. University of California, Santa Barbara; M.A. University of California, Riverside; Ph.D. University of Leicester; 35 years of experience in cultural resource management. Contribution: Contributed to ASR

Jin S. Lee, Senior Transportation Engineer. B.S. Civil Engineering, University of Washington; 28 years of experience in civil and environmental engineering for infrastructure and development projects. Contribution: Review of Noise Impact Assessment

Ngar kok James Lee, Transportation Engineer. B.S. and M. Phil. Civil Engineering, University of Westminster–London; Ph.D. Geotechnical Engineering, University of Texas, Austin; 10 years of experience in geotechnical engineering and 16 years of experience in pavement engineering; American Society of Civil Engineers earthquake engineering committee member and Soil Dynamics committee member, and National Cooperative Highway Research Program chair. Contribution: Review of Structure Preliminary Geotechnical Report

Ginger Lu, Transportation Engineer. B.S. Natural Biology, University of California, Berkeley, M.S. Civil Engineering, San Diego State University; 16 years of structural engineering experience specializing in hydraulics. Contribution: Prepared Hydraulic Study Report

Penny Nakashima, Senior Geologist Engineer. B.S. Geology, California State University, Los Angeles; 34 years of experience in hazardous waste assessment and investigation of air pollution control. Contribution: Oversight and review of Hazardous Waste Assessment

Julio Rodriguez, Associate Environmental Planner. B.A. and Master of Urban and Regional Planning, California State Polytechnic University, Pomona; 8 years of experience in environmental and transportation planning, environmental document preparation, and geographic information system (GIS) support. Contribution: Preparation of Hydrology and Floodplain, Hazardous Waste and Materials, and Cumulative Impacts sections

Samia Soueidan, Transportation Engineer. B.S. Civil Engineering, California State University, Long Beach; 12 years of experience in civil and environmental engineering. Contribution: Preparation and review of Noise Study Report

Christopher Stevenson, Associate District Biologist. B.S. and M.A. Environmental Education/A.S. Natural History, Lyndon State College; M.S. Ecological Design and Planning, Conway School; 9 years of experience performing resource impact analysis, State and federal permitting, biological technical reports, construction monitoring, and ecological restoration. Expert in field identification for flora of California and general bird surveys. U.S. Army Corps of Engineers Certification in Wetland Impact Analysis. Contribution: Prepared Natural Environment Study

Vanessa Velasco, Environmental Planner. B.S. Environmental Biology, California State University, Northridge; M.S. Environmental Science, Loyola Marymount University; 1 year of experience with environmental document preparation and assisting with biological field surveys. Contribution: Preparation of Comments and Coordination and List of Preparers sections

Robert John Wang, Associate Environmental Planner/Environmental GIS Coordinator. B.A. Geography/Environmental Studies, University of California, Los Angeles; GIS Certificate, California State University, Los Angeles; M.A. Geography/Urban Planning, California State University, Los Angeles; 15 years of experience in environmental document preparation, global positioning system (GPS) resource data acquisition and GIS map preparation. Contribution: Environmental document preparation and preparation of GIS mapping and exhibits

Newton Wong, Associate District Biologist. B.S. Natural Science, Geoscience and M.S. Environmental Science, California State University, Los Angeles; 11 years of experience in biological surveys, biological technical reports, and ecological restoration. Contribution: Review of Visual Assessment, Storm Water, and Construction Impacts sections

Shahriar Yadegari, Senior Transportation Engineer. B.S. Mechanical Engineering, Purdue University; 16 years of experience in civil engineering and construction and project development. Contribution: Project Manager

Chaffee Yiu, Environmental Planning Intern. B.S. and M.S. Civil Engineering, California State University, Long Beach; 10 years of experience in environmental planning and engineering, GPS resource data acquisition, and GIS map preparation. Contribution: GIS census map preparation

Andrew Yoon, Senior Transportation Engineer. B.S. Civil and Environmental Engineering, University of California, Los Angeles; 17 years of experience in civil and environmental engineering for infrastructure and development projects. Contribution: Review of Air Quality Impacts Assessment

Chapter 5 Distribution List

5.1 Locations Where IS/EA Can be Viewed

Copies of the Initial Study/Environmental Assessment (IS/EA) were made available for viewing at the following locations:

Caltrans Website	http://www.dot.ca.gov/dist07/resources/envdocs
Caltrans District 7	100 S. Main Street Los Angeles, CA 90012
Malibu City Hall	23825 Stuart Ranch Road Malibu, CA 90265
Malibu Public Library	23519 West Civic Center Way Malibu, CA 90265

5.2 Elected Officials

5.2.1 Federal

Senator Dianne Feinstein	11111 Santa Monica Blvd. Suite 915 Los Angeles, CA 90025
Senator Kamala Harris	312 N. Spring St. Suite 1748 Los Angeles, CA 90012
Congressman Ted Lieu	5055 Wilshire Boulevard, Suite 310 Los Angeles, CA 90036

5.2.2 State

Assemblymember Richard Bloom	2800 28th Street; Suite 150 Santa Monica, CA 90405
State Senator Henry Stern	5016 North Parkway Calabasas, Suite #222 Calabasas, CA 91302

5.2.3 County

Supervisor Sheila Kuehl	821 Kenneth Hahn Hall of Administration 500 W. Temple St. Los Angeles, CA 90012
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5.2.4 City of Malibu

Mayor Skylar Peak	23825 Stuart Ranch Road Malibu, CA 90265
Mayor Pro Tem Rick Mullen	23825 Stuart Ranch Road Malibu, CA 90265
Councilmember Lou La Monte	23825 Stuart Ranch Road Malibu, CA 90265
Councilmember Laura Rosenthal	23825 Stuart Ranch Road Malibu, CA 90265
Councilmember Jefferson Wagner	Conservation Department 23825 Stuart Ranch Road Malibu, CA 90265

5.3 Governmental Agencies

5.3.1 Federal Agencies

U.S. Environmental Protection Agency	600 Wilshire Blvd., Suite 1460 Los Angeles, CA 90017
U.S. Environmental Protection Agency	Region 9, Environmental Review Office 75 Hawthorne Street, (ENF-4-2) San Francisco, CA 94105
NOAA Fisheries	West Coast Region 501 W. Ocean Blvd., Suite 4200 Long Beach, CA 90802-4213
NOAA Fisheries	Office of Ecology and Conservation 1401 Constitution Avenue, Rm 6800 Washington, DC 20230
USDC National Oceanic and Atmospheric Administration (NOAA)	1315 East West Highway Silver Spring, MD 20910
US Federal Emergency Management Agency	1111 Broadway, Suite 1200 Oakland, CA 94607-4052
US Fish and Wildlife Service	370 Amapola Avenue #114 Torrance, CA 90501
US Department of Transportation	US Department of Transportation, Federal Highway Administration, California Division 888 S. Figueroa Street, Suite 750 Los Angeles, CA 90017
US Department of Interior, National Park Service	333 Bush Street, Suite 500 San Francisco, CA 94104-2828
Santa Monica Mountains National Recreation Area	401 West Hillcrest Drive Calabasas, CA 91302

U.S. Army Corps of Engineers	915 Wilshire Blvd., Suite 980 Los Angeles, CA 90017
U.S. Fish and Wildlife Service	2493 Portola Rd., Suite B Ventura, CA 93003
Native American Heritage Commission	915 Capitol Mall, Room 364 Sacramento, CA 95814
Native American Heritage Commission	1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95591
Advisory Council on Historic Preservation	401 F St. NW, Suite 308 Washington, DC 20001-2637

5.3.2 State Agencies

California Air Resources Board	Air Quality Science and Planning Division P.O. Box 2815 Sacramento, CA 95812
California Department of Fish and Wildlife	South Coast Region 3883 Ruffin Road San Diego, CA 92123
California Department of Transportation	Division of Environmental Analysis P.O. Box 942874, MS-27 Sacramento, CA 94274-0001
California Highway Patrol	West Los Angeles 6300 Bristol Parkway Culver City, CA 90230
California Regional Water Quality Control Board	Los Angeles Region 320 West Fourth Street, Suite 200 Los Angeles, CA 90013
California Transportation Commission	1120 N Street, Room 2221, MS-52 Sacramento, CA 95814
California Natural Resources Agency	1416 Ninth Street, Suite 1311 Sacramento, CA 95814
Governor's Office of Planning and Research	State Clearinghouse 1400 Tenth Street Sacramento, CA 94814
California Coastal Commission	South Central Coast District 89 S. California Suite #200 Ventura, CA 93001
California Coastal Conservancy	1330 Broadway, 13th fl. Oakland, CA 94612
California Environmental Protection Agency	1001 I Street, P.O. Box 2815 Sacramento, CA 95812
California Department of Parks and Recreation	1416 9th Street Sacramento, CA 95814

California Department of Toxic Substances Control	P.O. Box 806 Sacramento, CA 95812-0806
California State Historic Preservation Officer	1725 23rd St., Ste. 100 Sacramento, CA 95816
California Department of Fish and Wildlife	P.O. Box 1179 Ventura, CA 93012
Santa Monica Mountains Conservancy	570 W. Ave 26 Los Angeles, CA 90065
State Lands Commission	100 Howe Ave., Suite 100 South Sacramento, CA 95825-8202
California Department of Water Resources	P.O. Box 942836 Sacramento, CA 94236
Mountains Recreation and Conservation Authority	5810 Ramirez Canyon Road Malibu, CA 90265

5.3.3 Regional Agencies

Metropolitan Water District of Southern California	P.O. Box 54153 Los Angeles, CA 90054-0153
South Coast Air Quality Management District	Flood Control District 21865 Copley Drive Diamond Bar, CA 91765
Southern California Association of Governments	818 West 7th Street, 12th Floor Los Angeles, CA 90017
Southern California Edison Company	SCE Corp P.O. Box 800 Rosemead, CA 91770
Resource Conservation District of the Santa Monica Mountains	540 S. Topanga Canyon Blvd. Topanga, CA 90290
Metropolitan Transportation Authority	One Gateway Plaza Los Angeles, CA 90012-2952

5.3.4 Los Angeles County Agencies

County of Los Angeles	Department of Public Works 900 S. Fremont Avenue Alhambra, CA 91803
County of Los Angeles	Department of Regional Planning 320 West Temple Street, 13th Floor Los Angeles, California 90012
County of Los Angeles	Fire Department 1320 N. Eastern Avenue Los Angeles, CA 90063

County of Los Angeles	Sheriff's Department Malibu Station 27050 Agoura Road Agoura, CA 91301-5336
County of Los Angeles	Department of Beaches and Harbors 13837 Fiji Way Marina del Rey, CA 90292
Los Angeles County Fire Department	Central Region Division VII HQ 3970 Carbon Canyon Road Malibu, CA 90265-5005

5.3.5 City of Malibu Agencies

City of Malibu City Manager	23825 Stuart Ranch Road Malibu, CA 90265
City of Malibu Planning Department	23825 Stuart Ranch Road Malibu, CA 90265
City of Malibu Environmental Sustainability	23825 Stuart Ranch Road Malibu, CA 90265
City of Malibu Parks and Recreation Commission	23825 Stuart Ranch Road Malibu, CA 90265
City of Malibu Public Works/Engineering	23826 Stuart Ranch Road Malibu, CA 90265
Santa Monica - Malibu Unified School District	1651 16th Street Santa Monica, CA 90404

5.3.6 Public Stakeholders

Zuma Beach Properties	30745 Pacific Coast Highway Malibu, CA 90265
Surfrider Foundation West L.A./Malibu Chapter	2629 Main Street, #196 Santa Monica, CA 90405
Los Angeles Water Keeper	120 Broadway, Suite 105 Santa Monica, CA 90401
Heal The Bay Environmental Program	1444 9th Street Santa Monica, CA 90401
California Native Plant Society	2707 K Street, Suite 1 Sacramento, CA 95816-5130

5.3.7 Local Neighborhood Associations

Malibu Township Council	<i>No address</i>
Malibu Community Alliance	P.O. Box. 4252 Malibu, CA 90264
Malibu Coastal Land Conservancy	P.O. Box 2553 Malibu, CA 90265
David Szymanski	Santa Monica Mountains National Recreation Area 26876 Mulholland Highway Calabasas, CA 91302
Joseph Edminston, FAICP	Santa Monica Conservancy 5750 Ramirez Canyon Road Malibu, CA 90265
Joanne Verbon	6454 Lunita Road Malibu, CA 90265
Rosemary Sampson	31801 Cottontail Lane Malibu, CA 90265
Jorge Rubalcava	23825 Stuart Ranch Road Malibu, CA 90265
Marion Hastings	6224A Taria Drive Malibu, CA 90265
Kristie Klose	6750 Navigator Way, Suite 150 Goleta, CA 93117
David K. Jacobs	621 Charles E. Young Drive South Box 951606 Los Angeles, CA 90095
Hans Laetz	6402 Surfside Way Malibu, CA 90265
Jeff Lotman and Theresa Lotman	12400 Wilshire Boulevard, Suite 1400 Los Angeles, CA 90025
Patt Healy	6085 Paseo Canyon Drive Malibu, CA 90265
Scott Hubbell	6249 Frondosa Drive Malibu, CA 90265

Appendix A CEQA Checklist

Supporting documentation for all CEQA Checklist determinations is provided in Chapter 2 (Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures) of this Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI). Discussion of all impacts and avoidance, minimization, and/or compensation measures is provided under the appropriate topic heading in Chapter 2.

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CEQA ENVIRONMENTAL CHECKLIST

7-LA-1	56.4/56.9	07-29140
Dist.-Co.-Rte.	P.M/P.M.	E.A.

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included either following the applicable section of the checklist or is within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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I. AESTHETICS: Would the project:

a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. The new bridge will be 9 feet wider and up to 143 feet longer than the existing bridge. It may also have a slightly higher profile. The new bridge will have a more aesthetically pleasing design with bridge rails approved for use by the California Coastal Commission. No adverse effect is anticipated.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact. Air quality impacts due to implementation of the proposed project could occur during construction at a local scale. Construction impacts generally include, but are not limited to the following: airborne dust from grading, demolition, and dirt hauling, gaseous emissions from heavy equipment, delivery and dirt hauling trucks, employee vehicles, paints and coatings.

Air impacts from construction activities are considered temporary. Project construction will be conducted in accordance with all federal, state and local regulations that govern construction activities and emissions from its vehicles.

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact. Construction emissions would be short term and not expected to affect a substantial amount of people. The nearest sensitive receptors are 0.15-0.3 miles away. The receptors that are considered to be most sensitive are children and the elderly. The nearest school is approximately 1.5 miles to the south and the nearest healthcare facility is 6 miles to the northeast.

	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact. During construction, exhaust emissions from diesel-powered equipment and vehicles, as well as construction activities involving use of materials such as asphalt and coatings could create objectionable odors. However, such activities would be short-term and are not expected to affect a substantial number of people at any given time as defined by SCAQMD Rule 402.

IV. BIOLOGICAL RESOURCES: Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. The western snowy plover was observed foraging on the beach near the mouth of Trancas Creek. Caltrans coordinated with the USFWS via the informal Section 7 process and a "may affect, not likely to adversely affect" determination was issued on March 2, 2017. This determination included measures that will be implemented to avoid or minimize harm this the species. Measures will also be implemented to reduce potential impacts to migratory birds that may occur in the vicinity of the project. With these measures in place, there will be no/minimal impacts.

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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The proposed project would result in up to 1.15 acres of temporary impacts and 0.12 acres of permanent impacts to riparian and coastal lagoon resources. Restoration and compensatory mitigation will be undertaken pursuant to the regulatory permits that will be obtained for the project.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. The proposed project would result in up to 0.18 acres of temporary impacts and 0.12 acres of permanent impacts to federal wetlands. Restoration and compensatory mitigation will be undertaken pursuant to the regulatory permits that will be obtained for the project.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. Trancas Creek and lagoon meet the definition of an Environmentally Sensitive Habitat Area as identified in the City of Malibu's Local Coastal Program. This designation is intended to protect these resources from "significant disruption of habitat values." The creek and lagoon have been heavily disturbed and degraded resulting in a reduction in habitat value. The proposed project would affect a small portion of these resources and, restoration and enhancement will be implemented pursuant to regulatory permits. The project may also allow for the facilitation of a lagoon restoration project in the future.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. CULTURAL RESOURCES: Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VI. GEOLOGY AND SOILS: Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact. The project site is located in a seismically active region within Southern California; to reduce the risk of serious structural damage resulting from potential seismic events to acceptable levels, the project will be designed and constructed in accordance with applicable seismic standards.

iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. The project site is located in a seismically active region within Southern California; to reduce the risk of serious structural damage resulting from potential seismic events to acceptable levels, the project will be designed and constructed in accordance with applicable seismic standards.

iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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| <p>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</p> <p>b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</p> | <p>An assessment of the greenhouse gas emissions and climate change is included in the body of environmental document. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the body of the environmental document.</p> |
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VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact. There will be a temporary reduction in traffic capacity on PCH during construction. PCH is the only major road into or out of this portion of Malibu. Should a wildfire erupt in the hills above Malibu that requires the community to be evacuated, there may be a delay in getting people out of the area. However, law enforcement personnel would be expected to be present to facilitate a smooth evacuation.

IX. HYDROLOGY AND WATER QUALITY: Would the project:

a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact. There is a potential for temporary impacts to water quality in Trancas Creek and lagoon due to construction activity. However, a water pollution control plan, including water diversion, would be implemented to ensure that impacts are avoided or minimized to the greatest extent practicable.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

X. LAND USE AND PLANNING: Would the project:

a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XI. MINERAL RESOURCES: Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XII. NOISE: Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. Any increase in noise would be a result of construction activity. This would be temporary and only occur during the daytime hours (typically 7 AM to 7 PM Monday through Saturday). Given that the nearest noise sensitive receptor is 0.25 mile away, and that the project contractor would adhere to applicable Caltrans and County construction-related noise standards, this impact is considered less than significant.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Less Than Significant Impact. Groundborne vibration and noise would occur as a result of pile driving and other construction activity. These would be temporary and only occur during the daytime hours (typically 7 AM to 7 PM Monday through Saturday).

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Less Than Significant Impact. There would be a temporary increase in noise above background levels during construction of this project. This would be temporary and only occur during the daytime hours (typically 7 AM to 7 PM Monday through Saturday). The contractor would be required to adhere to applicable Caltrans and County construction-related noise standards.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIII. POPULATION AND HOUSING: Would the project:

a) Induce substantial 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

XIV. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XV. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Less Than Significant Impact. During construction, the number of traffic lanes in each direction would be reduced from 4 to 2. Also, there are no alternate roads that could be used for detours in this area. This might result in a temporary, minimal increase in traffic and wait times for vehicles, including emergency service vehicles, moving through the area.				
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES: Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
XVIII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XIX. MANDATORY FINDINGS OF SIGNIFICANCE

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| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Less Than Significant Impact. There will be a temporary adverse effect on biological resources due to habitat disturbance during construction. However, the affected will be small and is already heavily disturbed. Also, the disturbed area will be restored post-construction. Neither build alternative would hinder the potential future restoration of the lagoon or elimination of barriers to fish passage.

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| 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)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Less Than Significant Impact. This project combined with the potential lagoon restoration and creek enhancement projects could have a beneficial impact by restoring Trancas Creek as a potential steelhead trout spawning stream.

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| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
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Less Than Significant Impact. There will be construction-related impacts involving noise and traffic. However, these will be temporary and are considered less than significant.

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Appendix B Section 4(f) De Minimus Impact Determination

The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by the California Department of Transportation (Caltrans) under its assumption of responsibility pursuant to 23 United States Code (USC) 327.

B.1 Section 4(f) Code and Regulations

Section 4(f) originated in Section 4(f) of the Department of Transportation Act of 1966 (Act) (Pub. L. 89-670, 80 Stat. 931) and is now codified at 23 USC 138 and 49 USC 303. Section 4(f), or what was 23 Code of Federal Regulations (CFR) 774 of the Act, was written in an effort to preserve publicly owned parks and recreational areas, waterfowl and wildlife refuges, and historic sites considered to have national, state, or local significance. Section 4(f) stipulated that the Federal Highway Administration (FHWA) and other United States Department of Transportation (USDOT) agencies cannot approve the use of land from a national, state, or locally significant resource unless there is no feasible and prudent alternative to the use of the land and all possible minimization measures are considered. As a publicly owned park of local significance, Zuma County Beach qualifies as a Section 4(f) resource.

The authority to administer Section 4(f) and make Section 4(f) approvals resides with the Secretary of Transportation. The Secretary of Transportation is responsible for soliciting and considering the comments of other entities and the appropriate official(s) with jurisdiction over the Section 4(f) property. However, the ultimate decision-maker is the Secretary of Transportation.

Section 4(f) applies when a USDOT agency approves a transportation program or project that uses a Section 4(f) property. In order for Section 4(f) to apply, a proposed project must meet the following four conditions:

1. The project must require an approval from FHWA in order to proceed;
2. The project must be a transportation project;
3. The project must require the use of land from a property protected by Section 4(f);
and
4. None of the regulatory applicability rules or exceptions applies (see 23 CFR 774.11 and 13).

The use of a Section 4(f) property is defined in the following three ways:

1. Permanent incorporation/permanent easement of right of way;
2. Temporary occupancy; and
3. Constructive use.

Full and partial permanent incorporation of a 4(f) resource into a transportation facility is defined as either an outright purchase of the 4(f) resource to incorporate into the transportation right-of-way or when the applicant for federal-aid funds has acquired a property interest that allows permanent access onto the property such as permanent easement for maintenance or other transportation-related purposes. The 4(f) use of the proposed project falls into the category of partial permanent incorporation of the County Beach's right-of-way into the transportation facility.

B.2 Section 4(f) De Minimis Determination

Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only de minimis impacts on lands protected by Section 4(f). This revision provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a de minimis impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) de minimis findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

B.3 Section 4(f) Use

Zuma County Beach (Beach) is located on the southwest side of Pacific Coast Highway (PCH) in Malibu. It extends from near the intersection of PCH and Trancas Canyon Road south to Westward Beach, approximately 4 miles away. The beach is owned and operated by the Los Angeles County Department of Beaches and Harbors. On-site facilities include volleyball courts, restrooms, showers, life guard stations, bike trails, parking lots, and food stands.

The Beach provides year-round open space recreation for its visitors. Activities on site include beach volleyball, filming, swimming, surfing, diving, fishing, kiteboarding, windsurfing, bodyboarding, and other outdoor activities. The Beach is considered to be a significant and unique property within the County of Los Angeles.

The project will permanently impact a maximum of 7,275 square feet (0.17 acre) and temporarily impact a maximum of 34,690 square feet (0.80 acre) of Beach property. The area affected does not include any built facilities and is not expected to impact the functions of the Beach itself. The project is not expected to impact public access to Zuma County Beach, and the temporary impact to parking at Zuma Beach Lot 12 is expected to be minimal (Figure B-1).

Temporary use of the “Authorized Vehicles Only” access at the west end of the parking lot is expected during construction. The gate is to be guarded at all times during construction, and no public access is allowed through the “Authorized Vehicles Only” access. When construction is not in session, the gate should be locked and secured. No permanent access impact to the Zuma County Beach is expected, and all temporarily disturbed areas will be restored to their original state after construction.

B.4 Avoidance and Minimization Measures

This reduced impact footprint was achieved through multiple revisions to both build alternatives (Alternatives 2 and 3). The original maximum build alternative would have impacted an estimated 70 parking spots in addition to the partial beach right-of-way takes due to proximity and utility relocation impacts.

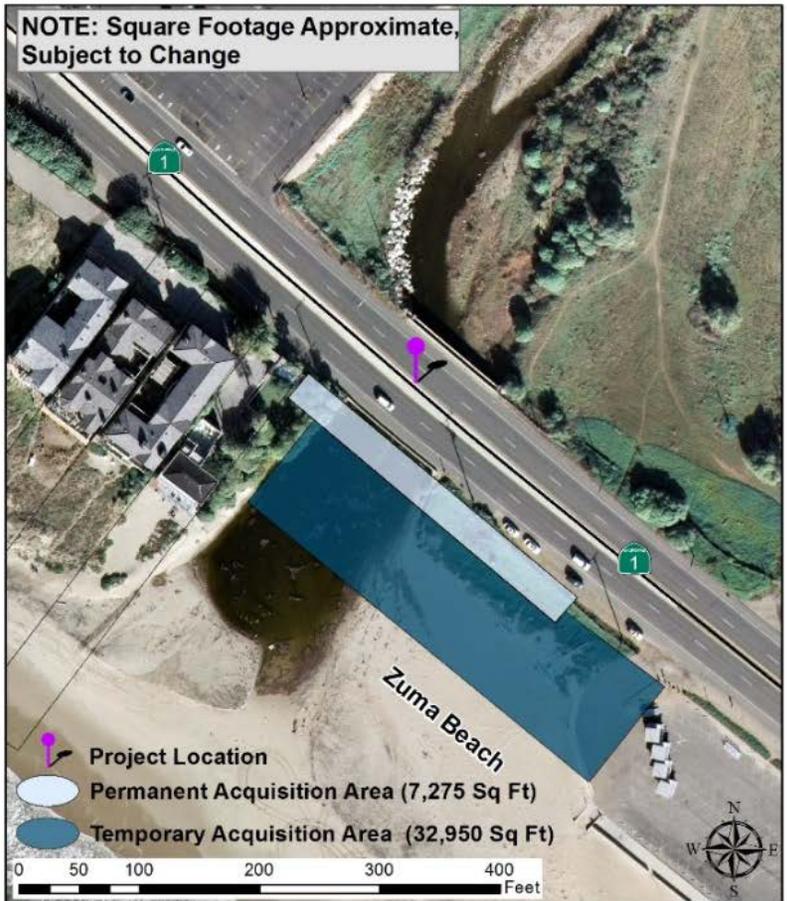
In order to avoid loss of parking spaces, Caltrans is proposing to place utility poles within Caltrans’ right-of-way and will coordinate with officials from the Los Angeles County Department of Beaches and Harbors during the land acquisition process. A Temporary Construction Easement (TCE) area is needed during construction but will be returned to its original state post-construction. Detailed design and construction of the Trancas Creek Bridge will be further discussed between the Project Development Team (PDT) and the Los Angeles County Department of Beaches and Harbors during the design phase. This project proposes that traffic control be implemented during construction to ensure unimpeded access to Zuma Beach.

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Alt 2 - Short Bridge Construction Easement
California Department of Transportation
District 7, Los Angeles

Map Created by Robert Wang, Division of Environmental Planning, 3-6-17



Alt 3 - Long Bridge Construction Easement
California Department of Transportation
District 7, Los Angeles

Figure B-1 Approximate Right-of-Way Acquisition Required

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B.5 Section 4(f) Public Notice

The 4(f) commenting period was conducted from March 9 to March 25, 2017. During this time, 18 public notices were posted around the Zuma County Beach facilities. Any comments received from the Los Angeles County Department of Beaches and Harbors and from the public were considered and revisions were made as appropriate. An email was also sent out on March 15, 2017, to scoping meeting participants who left their information with Caltrans.

In addition, comments made regarding the Section 4(f) resource during the Draft Environmental Document circulation will also be considered, and revisions will be made as appropriate.

B.6 Section 4(f) Conclusion

A de minimis impact involves the use of Section 4(f) property that is generally minor in nature. The transportation use of the Section 4(f) resource, together with any impact avoidance, minimization, and enhancement measures incorporated into the project, does not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f).

Based on the information presented, Caltrans believes that the Trancas Creek Bridge Replacement project qualifies for a de minimis finding under Section 4(f). The partial acquisition and temporary use of Zuma County Beach for transportation use is minor in nature, and this project does not permanently adversely affect the activities, features, and attributes offered at this recreational facility. The 4(f) de minimis concurrence letter was signed by the Los Angeles County Department of Beaches and Harbors 4(f) and Caltrans on April 20, 2017.

B.7 Resources Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreational facilities, wildlife refuges and historic properties found within or next to the project area that do not trigger Section 4(f) protection because either: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

Section 4(f) Resource	Section 4(f) Impacts	Section 4(f) Determination
Santa Monica Mountains National Recreational Area	The Santa Monica Mountains National Recreational Area is situated approximately 1,600 feet away from the project site (Figure B-2). The proposed project is not expected to have any impact to the National Recreational Area due to its distance from the project site. The proposed project will not have any potential impacts to access to the National Recreational Area since all of its public access points are more than 18 miles away from the project site. No further assessment for the Santa Monica Mountains National Recreational Area is required.	No Effect

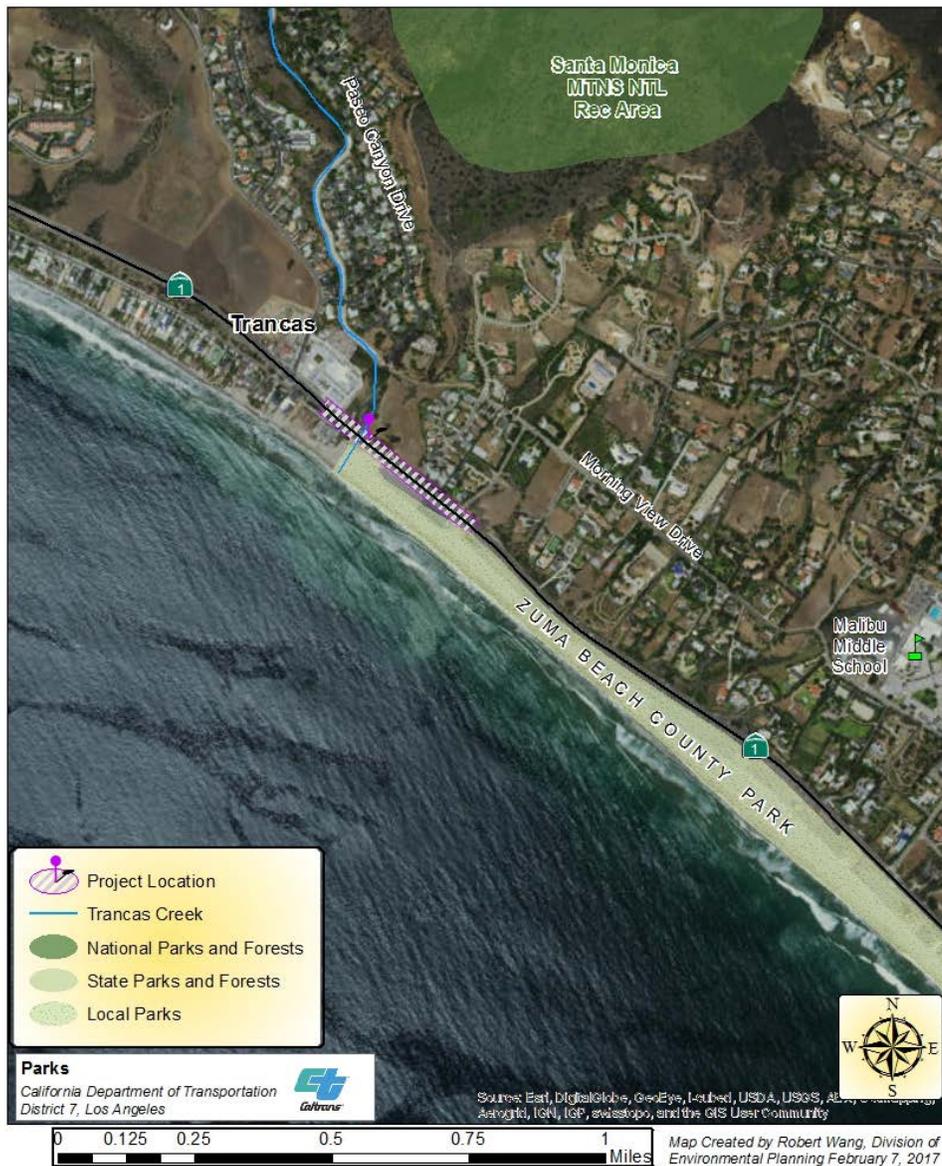


Figure B-2 Parks Location Map

Appendix C Title VI Policy Statement

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STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR
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March 2013

**NON-DISCRIMINATION
POLICY STATEMENT**

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

For information or guidance on how to file a complaint based on the grounds of race, color, national origin, sex, disability, religion, sexual orientation, or age, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

Additionally, if you need this information in an alternate format, such as in Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone: (916) 324-0449, TTY: 711, or via Fax: (916) 324-1949.

A handwritten signature in blue ink, appearing to read "Malcolm Dougherty".

MALCOLM DOUGHERTY
Director

"Caltrans improves mobility across California"

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Appendix D Summary of Relocation Benefits

D.1 California Department of Transportation Relocation Assistance Program

D.1.1 Relocation Assistance Advisory Services

D.1.1.1 Declaration of Policy

“The purpose of this title is to establish a *uniform policy for fair and equitable treatment* of persons displaced as a result of federal and federally assisted programs in order that such persons *shall not suffer disproportionate injuries* as a result of programs designed for the benefit of the public as a whole.”

The Fifth Amendment to the U.S. Constitution states, “No Person shall...be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation.” The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 CFR, Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

D.1.1.2 Fair Housing

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require the California Department of Transportation (Caltrans) to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor who will work closely with each displacee in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-

occupants are given a detailed explanation of the State’s relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations, and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Caltrans relocation advisor.

D.1.1.3 Relocation Assistance Advisory Services

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Caltrans will provide relocation advisory assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. Caltrans will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are “decent, safe and sanitary.” Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning federal and State assisted housing programs, and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable “decent, safe and sanitary” replacement dwelling, available on the market, is offered to them by Caltrans.

D.1.1.4 Residential Relocation Payments

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

D.1.1.5 Moving Costs

Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until Caltrans obtains control of the property in order to be eligible for relocation payments.

D.1.1.6 Purchase Differential

In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 180 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is \$22,500. If the total entitlement (without the moving payments) is in excess of \$22,500, the Last Resort Housing Program will be used (see the explanation of the Last Resort Housing Program below).

D.1.1.7 Rent Differential

Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by Caltrans prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made

when Caltrans determines that the cost to rent a comparable “decent, safe and sanitary” replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the Down Payment section below. The maximum amount payable to any eligible tenant and any owner-occupant of less than 180 days, in addition to moving expenses, is \$5,250. If the total entitlement for rent supplement exceeds \$5,250, the Last Resort Housing Program will be used.

In order to receive any relocation benefits, the displaced person must buy or rent and occupy a “decent, safe and sanitary” replacement dwelling within 1 year from the date Caltrans takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

D.1.1.8 Down Payment

The down payment option has been designed to aid owner-occupants of less than 180 days and tenants in legal occupancy prior to Caltrans’ initiation of negotiations. The down payment and incidental expenses cannot exceed the maximum payment of \$5,250. The 1-year eligibility period in which to purchase and occupy a “decent, safe and sanitary” replacement dwelling will apply.

D.1.1.9 Last Resort Housing

Federal regulations (49 Code of Federal Regulations [CFR] 24) contain the policy and procedure for implementing the Last Resort Housing Program on federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of a lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the \$22,500 and \$5,250 limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, Caltrans will, within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced
- Specific arrangements needed to accommodate any family member(s) with special needs
- Financial ability to relocate into comparable replacement dwelling that will adequately house all members of the family
- Preferences in area of relocation
- Location of employment or school

D.1.1.10 Nonresidential Relocation Assistance

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

D.1.1.11 Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an item pertaining to the realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to \$2,500, for reasonable expenses actually incurred.

D.1.1.12 Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to \$10,000 for reasonable expenses actually incurred.

D.1.1.13 Fixed In Lieu Payment

A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last 2 taxable years prior to the relocation and may not be less than \$1,000 nor more than \$20,000.

D.1.1.14 Additional Information

Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, except for any federal law providing local “Section 8” Housing Programs.

Any person, business, farm or nonprofit organization which has been refused a relocation payment by the Caltrans relocation advisor or believes that the payment(s) offered by the agency are inadequate, may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from Caltrans Right of Way. California’s law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

D.1.1.15 Residential Relocation Payments Program

For more information or a brochure on the residential relocation program, please contact Chanin McKeighen at Chanin_McKeighen@dot.ca.gov, or (559) 445-6237.

The brochure on the residential relocation program is also available in English at http://www.dot.ca.gov/hq/row/pubs/residential_english.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/residential_spanish.pdf.

If you own or rent a mobile home that may be moved or acquired by Caltrans, a relocation brochure is available in English at http://www.dot.ca.gov/hq/row/pubs/mobile_eng.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/mobile_sp.pdf.

D.1.1.16 Business and Farm Relocation Assistance Program

For more information or a brochure on the relocation of a business or farm, please contact Chanin McKeighen at Chanin_McKeighen@dot.ca.gov, or (559) 445-6237.

The brochure on the business relocation program is also available in English at http://www.dot.ca.gov/hq/row/pubs/business_farm.pdf and in Spanish at http://www.dot.ca.gov/hq/row/pubs/business_sp.pdf.

D.1.2 Additional Information

No relocation payment received would be considered as income for the purpose of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law (except for any federal law providing low-income housing assistance).

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Appendix E Glossary of Technical Terms

ALLUVIUM	Material developed by running water.
AMBIENT	Refers to surrounding, external, or unconfined conditions.
AMBIENT NOISE	Exterior sound (the surrounding sound from all sources near and far).
ANADROMOUS	Refers to fish that typically inhabit seas or lakes but ascend streams to spawn; for example, salmon.
AREA OF POTENTIAL EFFECT (APE)	A term used in Section 106 of the National Historic Preservation Act to describe the area in which historic resources may be affected by a federal undertaking.
ARTERIAL	A highway or local road that primarily serves through traffic
ATTAINMENT AREA	A geographic area in which levels of a criteria air pollutant meet the health-based primary standard (National Ambient Air Quality Standard, or NAAQS) for the pollutant. An area may have an acceptable level for one criteria air pollutant, but may have unacceptable levels for others. Thus an area could be both attainment and nonattainment at the same time. Attainment areas are defined using federal pollutant limits set by the United States Environmental Protection Agency (USEPA).
BENEFICIAL USE	A use of a natural water resource that enhances the social, economic, and environmental well-being of the user. Twenty-one beneficial uses are defined for the waters of California, ranging from municipal and domestic supply to fisheries and wildlife habitat.
BENT	Vertical support of a structure standing in a stream or other body of water.
BEST AVAILABLE CONTROL MEASURES (BACM)	Represent fugitive dust control actions which are required to be implemented within the boundaries of the South Coast Air Basin. A detailed listing of best available control measures for each fugitive dust source type shall be as contained in the most recent Rule 403 Implementation Handbook, now or hereafter adopted by the Governing Board.
BEST MANAGEMENT PRACTICE (BMP)	Any program, technology, process, operating method, measure, or device that controls, prevents, removes or reduces pollution.
BRACKISH	Water that has salt concentration greater than fresh water (>.05 0/00) and less than seawater (<35 0/00).
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)	State legislation enacted in 1970 and subsequently amended. It requires public agencies to regulate activities which may affect the quality of the environment so that major consideration is given to preventing damage to the environment.

COASTAL ZONE MANAGEMENT ACT OF 1972 (CZMA)	This act, administered by the National Oceanic and Atmospheric Administration (NOAA), provides for the management of the nation's coastal resources, including the Great Lakes. The goal is to "preserve, protect, develop, and where possible, to restore or enhance the resources of the nation's coastal zone."
CORRIDOR	A strip of land between two termini within which traffic, topography, environment, and other characteristics are evaluated for transportation purposes.
COUNCIL ON ENVIRONMENTAL QUALITY (CEQ)	The National Environmental Policy Act (NEPA) established the CEQ within the Executive Office of the President to ensure that federal agencies meet their obligations under NEPA. CEQ oversees NEPA implementation, principally through issuing guidance and interpreting regulations that implement NEPA's procedural requirements.
CUMULATIVE IMPACT (CEQA)	<p>The CEQA definition of cumulative impact comes from the Office of Planning and Research (OPR). Section 15355 of OPR's CEQA Guidelines provides the following context:</p> <p>Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.</p> <p>The individual effects may be changes resulting from a single project or a number of separate projects.</p> <p>The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.</p>
CUMULATIVE IMPACT (NEPA)	<p>The NEPA definition of a cumulative impact comes from the Council on Environmental Quality (CEQ), which defines a cumulative impact as:</p> <p>...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. (40 CFR §1508.7.)</p>
dBA	A-weighted decibels are adjusted to approximate the way the average person hears sound.
DECIBELS (dB)	With respect to sound, decibels measure a scale from the threshold of human hearing, 0 dB, upwards towards the threshold of pain, about 120-140 dB. Because decibels are such a small measure, they are computed logarithmically and cannot be added arithmetically. An increase of 10 dB is perceived by the human ear as a doubling of noise.

DE MINIMUS	A condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.
DESIGN LIFE	The length of time that a transportation facility or improvement is intended to remain serviceable, frequently expressed in years.
ENDANGERED	Plant or animal species that are in danger of extinction throughout all or a significant portion of its range.
EROSION	The wearing away of the land surface by running water, wind, ice, or other geological agents.
FEDERAL HIGHWAY ADMINISTRATION (FHWA)	The federal agency within the United States Department of Transportation (USDOT) responsible for administering the Federal-Aid Highway Program and the Motor Carrier Safety Program.
FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM (FTIP)	A constrained 4-year prioritized list of all transportation projects that are proposed for federal and local funding. The FTIP is developed and adopted by the Metropolitan Planning Organization (MPO)/Regional Transportation Planning Agency (RTPA) and is updated every 2 years. It is consistent with the Regional Transportation Plan (RTP) and it is required as a prerequisite for federal funding.
FINDING OF NO SIGNIFICANT IMPACT (FONSI)	A document by a federal agency briefly presenting the reasons why an action, not otherwise categorically excluded, will not have a significant effect on the human environment and therefore does not require the preparation of an Environmental Impact Statement (EIS).
GREENHOUSE GASES (GHGs)	Gases that trap heat in the atmosphere.
HABITAT	Place where a plant or animal lives.
HYDRIC SOIL	Soil subject to saturation or inundation.
INITIAL STUDY (IS)	Under CEQA, the Initial Study is prepared to determine whether there may be significant environmental effects resulting from a project. The Initial Study is attached to the Negative Declaration (ND) or Mitigated Negative Declaration (MND). It can become the basis of an Environmental Impact Report (EIR) if it concludes that the project may cause significant environmental effects that cannot be mitigated below the level of significance.
LEAD AGENCY (CEQA)	“Lead Agency” means the public agency which has primary responsibility for carrying out or approving a project which may have a significant effect on the environment and preparing the environmental document.
LEAD AGENCY (NEPA)	The agency or agencies preparing or having taken primary responsibility for preparing the environmental impact statement.

MAINTENANCE AREA	A federal term to describe any geographic region of the United States designated nonattainment pursuant to the Clean Air Act Amendments of 1990 (CAAA) and subsequently re-designated to attainment subject to the requirement to develop a maintenance plan under Section 175A of the CAAA.
MARSH	Wetland dominated by grassy vegetation, such as cattails and sedges.
MEDIAN	The portion of a divided highway separating the traveled ways in opposite directions.
MITIGATED NEGATIVE DECLARATION (MND)	The CEQA document that is used when the Initial Study concludes that a project's potential significant effect on the environment can be reduced below the level of significance with the incorporation of mitigation measures.
MULTIMODAL	Pertaining to more than one method of traveling.
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT (NPDES)	“...is required for facilities and activities that discharge waste into surface waters from a confined pipe or channel.”
NEGATIVE DECLARATION (ND)	The CEQA document that is used when the Initial Study concludes that a project will have no significant impact on the environment.
NONATTAINMENT AREA	“Nonattainment Area” means any geographic region of the United States that the United States Environmental Protection Agency (USEPA) has designated as a nonattainment area for a transportation-related pollutant(s) for which a National Ambient Air Quality Standard (NAAQS) exists.
PALEONTOLOGY	The study of life in past geologic time based on fossil plants and animals and including phylogeny, their relationships to existing plants, animals, and environments, and the chronology of the earth's history.
PENETROMETRY	Determining the consistency or hardness of a substance by measuring the depth or rate of penetration of a rod or needle driven into an object by a known force.
PERENNIAL CREEK	A creek that has continuous flow in parts of its stream bed all year round during years of normal rainfall, except for infrequent periods of severe drought.
PLANT COMMUNITY	A collection or association of plant species with a designated geographical unit, which forms a relatively uniform patch, distinguishable from neighboring patches of different vegetation types.

PROJECT (CEQA)	<p>California Public Resources Code §21065 defines a “project” as an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following:</p> <p>An activity directly undertaken by any public agency.</p> <p>An activity undertaken by a person which is supported, in whole or in part, throughout contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.</p> <p>An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.</p>
PROJECT (FHWA)	<p>23 CFR §1.2 defines a project as an undertaking by a State highway department for highway construction, including preliminary engineering, acquisition of rights-of-way and actual construction, or for highway planning and research, or for any other work or activity to carry out the provisions of the federal laws for the administration of federal-aid for highways.</p>
RECEPTORS	<p>Term used in air quality and noise studies that refers to houses or businesses that could be affected by a project.</p>
REGULATORY AGENCY	<p>An agency that has jurisdiction by law.</p>
REGIONAL TRANSPORTATION IMPROVEMENT PLAN (RTIP)	<p>RTIP is a synonym for the FTIP and it refers to the programming done by the MPO/RTPA as part of the development of the RTP. Also called a METROPOLITAN TRANSPORTATION IMPROVEMENT PLAN (MTIP).</p>
RESPONSIBLE AGENCY	<p>A “public agency, other than the lead agency which has responsibility for carrying out or approving a project” (PRC 21069). The CEQA Guidelines further explains the statutory definition by stating that a “responsible agency” includes “all public agencies other than the Lead Agency which have discretionary approval power over the project” (14 CCR 15381). State and local public agencies that have discretionary authority to issue permits, for example, fall into this category.</p>
REVEGETATION	<p>Planting of indigenous plants to replace natural vegetation that is damaged or removed as a result of highway construction projects or permit requirements.</p>
RIGHT-OF-WAY	<p>A general term denoting land, property, or interest therein, usually in a strip acquired for or devoted to transportation purposes.</p>
RIPARIAN	<p>Along banks of rivers and streams; riverbank forests are often called gallery forests.</p>
RIPRAP	<p>Randomly placed rock or concrete used to strengthen an embankment or protect it from erosion.</p>

RUDERAL	Disturbed area with a prevalence of introduced weedy species. Ruderal habitats are associated with unpaved highway shoulders and weedy areas around and between dwellings and other structures.
SCOPING	NEPA defines scoping as an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action (40 CFR §1501.7). Under CEQA, scoping is designed to examine a proposed project early in the Environmental Impact Report (EIR) analysis/review process, and is intended to identify the range of issues pertinent to the proposed project and feasible alternatives or mitigation measures to avoid potentially significant environmental effects.
SCOUR	Erosion caused by moving water.
SIGNIFICANCE (CEQA)	<p>CEQA defines a "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant" (15382).</p> <p>CEQA requires that the lead agency identify each "significant effect on the environment" resulting from the project and avoid or mitigate it.</p> <p>The CEQA Guidelines include mandatory findings of significance for certain effects, thus requiring the preparation of an Environmental Impact Report (EIR).</p>
SIGNIFICANCE (NEPA)	<p>Under NEPA, an Environmental Impact Statement (EIS) is required when the proposed federal action has the potential to "significantly affect the quality of the human environment." To determine that potential, one must consider both the context in which the action takes place and the intensity of its effect. Section 1508.27 of the Council on Environmental Quality (CEQ) regulations defines the term "significantly" as:</p> <p><i>Significantly as used in NEPA requires considerations of both context and intensity:</i></p> <ul style="list-style-type: none">A. Context. This means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.B. Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following should be considered in evaluating intensity:

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
2. The degree to which the proposed action affects public health or safety.
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial
5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. [43 FR 56003, Nov. 29, 1978; 44 FR 874, Jan. 3, 1979].

SPALL	Flaking, cracking, peeling, crumbling or chipping of concrete or brickwork, particularly where parts of the surface might have been blown off.
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SPECIAL-STATUS SPECIES	Plant or animal species that are either (1) federally listed, proposed for or a candidate for listing as threatened or endangered; (2) bird species protected under the federal Migratory Bird Treaty Act; (3) protected under state endangered species laws and regulations, plant protection laws and regulations, Fish and Game codes, or species of special concern listings and policies; or (4) recognized by national, state, or local environmental organizations (e.g., California Native Plant Society).
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SPHERE OF INFLUENCE	A planning boundary outside of an agency's legal boundary (such as a city limit) that designates the agency's probable future boundary and service area.
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THREATENED	A species that is likely to become endangered in the foreseeable future in the absence of special protection.
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VEHICLE MILES TRAVELED (VMT)	The number of miles traveled by vehicles for a specified time period.
VIEWSHED	View; total visible area from the position of a single observer or the total visible area from observers in multiple positions.
VOLATILE ORGANIC COMPOUND (VOC)	Any compound of carbon that undergoes atmospheric photochemical reactions.
WATERSHED	The area of land that drains into a specific waterbody.
WATERS OF THE UNITED STATES	<p>As defined by the United States Army Corps of Engineers (USACE) in 33 CFR 328.3(a):</p> <ol style="list-style-type: none">1. All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;2. All interstate waters including interstate wetlands;3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce, including any such waters:<ol style="list-style-type: none">(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;4. All impoundment of waters otherwise defined as waters of the United States under this definition;5. Tributaries of waters identified in paragraphs 1-4;6. The territorial seas;7. Wetlands adjacent to waters (waters that are not wetlands themselves) identified in paragraphs 1-6.
WETLAND	Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Appendix F Environmental Commitments
Record

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Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
Land Use				
LU-1	In order to avoid loss of Zuma Beach parking spaces, the California Department of Transportation (Caltrans) will relocate utility poles to the edge of Caltrans right-of-way instead of onto beach property as originally proposed.	4(f) Concurrence Letter, DED	During Construction	Utilities, Resident Engineer, Contractor
LU-2	The Temporary Construction Easement (TCE) area will be returned to its original state after construction has been completed. Detailed design and construction of the Trancas Creek Bridge will be further discussed between the Project Development Team (PDT) and the Los Angeles County Department of Beaches and Harbors during the design phase.	4(f) Concurrence Letter, DED	Design, During Construction	Project Biologist, Resident Engineer, Contractor
LU-3	Traffic control will be implemented during construction to ensure unimpeded access to Zuma County Beach.	DED	During Construction	Resident Engineer, Contractor
LU-4	The "Authorized Vehicles Only" entrance to the Zuma Beach parking lot will be utilized by construction vehicles to access the southbound side of the bridge. To prevent unauthorized access by the public, the entrance will be guarded at all times during construction and no public access will be allowed. When construction is not active, the gate will be locked and secured as directed by the Los Angeles County Beaches and Harbors Department.	4(f) Concurrence Letter, DED	Design, During Construction	Resident Engineer, Contractor
Community Impacts				
COM-1	To ensure that property owners are properly and fairly compensated for any acquisition required for this project, adequate funds will be set aside and utilized for that purpose.	DED	Pre-Construction, During Construction, Post-Construction	Right-of-Way Technician, Project Manager, Resident Engineer
COM-2	Caltrans will provide relocation assistance according to the Relocation Assistance Program outlined by Appendix D of this document.	ROW/RE	Pre-Construction, During Construction, Post-Construction	Right-of-Way Technician, Project Manager, Resident Engineer
COM-3	Caltrans will coordinate with the homeowner throughout the planning, construction, and post-construction phase to ensure the needs of the relocated persons are met and the relocation process takes place smoothly.	ROW/RE	Pre-Construction, During Construction, Post-Construction	Right-of-Way Technician, Project Manager, Resident Engineer
Utilities and Emergency Services				
UT-1	All affected utility infrastructure will be relocated with consideration to minimize any disruption of service and to minimize any effects as much as possible.	DED	Design, During Construction	Utilities, Resident Engineer, Contractor
UT-2	A Transportation Management Plan will be implemented to provide detailed access and detour strategies that will minimize response times for emergency and public services.	DED	Design, During Construction	Project Engineer, Resident Engineer, Contractor
UT-3	The California Department of Transportation (Caltrans) will work with the City of Malibu to ensure public access and the availability of emergency and public services during the construction period.	DED	Design, During Construction	Resident Engineer, Contractor
Traffic and Transportation				
TT-1	All affected transportation infrastructure will be replaced with equivalent transportation infrastructure of the same capacity as that currently present.	DED	Design, During Construction	Project Engineer, Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
TT-2	The California Department of Transportation (Caltrans) and its construction contractors will seek to minimize disruption of service as much as possible through the use of a Transportation Management Plan that will provide detailed access and detour strategies to minimize delays for the public and emergency vehicles. Recommendations in the Transportation Management Plan will include the following:	DED	Design, During Construction	Project Engineer, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Maintaining two open lanes to the traveling public during peak hours 	DED	Design, During Construction	Project Engineer, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Providing bicycle and pedestrian access at all times during construction 	DED	During Construction	Project Engineer, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Adhering to Pacific Coast Highway lane closure protocols 	DED	During Construction	Project Engineer, Resident Engineer, Contractor
TT-3	Caltrans will work with the City of Malibu to ensure public access and the availability of emergency and public services during the construction period.	DED	During Construction	Resident Engineer, Contractor
Visual and Aesthetics				
VIS-1	The designs on the barrier used on the Zuma Beach parking lot can be incorporated into the new Trancas Creek Bridge to provide thematic consistency in the area.	DED	Design, During Construction	Landscape Architect, Project Engineer, Resident Engineer, Contractor
VIS-2	A bridge railing design approved by the City of Malibu through the Local Coastal Development Permit process, under the delegation of the California Coastal Commission, will be used to improve the visibility of the beach and hills from the roadway.	DED	Design, During Construction	Coastal Commission Liaison, Project Engineer, Resident Engineer, Contractor
VIS-3	The use of earth-tone colors that match the natural soil/rock color in the vicinity should be considered for the concrete portions of the structure. This will help visually blend the structure to the natural surroundings.	DED	Design, During Construction	Landscape Architect, Project Engineer, Resident Engineer, Contractor
VIS-4	Nonnative plant species within and around the project site should be removed where possible. The planting of native plants around disturbed work areas will help restore the work site to a more natural state, creating a more consistent aesthetic for the area.	DED	Design, During Construction	Biologist, Landscape Architect, Project Engineer, Resident Engineer, Contractor
VIS-5	Materials and design of site features such as coastal access points should be appropriate for the visual character of the location.	DED	Design	Landscape Architect, Project Engineer
Cultural Resources				
CUL-1	It is California Department of Transportation (Caltrans) policy to avoid impacts to cultural resources whenever possible. If buried cultural materials are encountered during construction, Caltrans' policy is to stop work immediately in that area until a qualified archaeologist can evaluate the nature and significance of the find. Work can	Standard Specs, DED	During Construction	Project Archaeologist, Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
	only resume after the approval to proceed has been given by a qualified Caltrans archaeologist or the District Heritage Resource Coordinator.			
CUL-2	If human remains are discovered, State Health and Safety Code Section 7050.5 requires that all work stops immediately, no further disturbance is to occur in the immediate vicinity of the remains, and the County Coroner be contacted immediately. District 7 will also be contacted immediately upon the unexpected finding of human remains. If the remains are thought to be Native American, Health and Safety Code Section 7050.5 dictates that within 24 hours of the discovery, the Coroner will notify the Native American Heritage Commission who will then notify the Most Likely Descendant pursuant to Public Resources Code (PRC) Section 5097.98. Further provisions of PRC 5097.98 will also be followed as applicable.	Standard Specs, DED	During Construction	Project Archaeologist, Resident Engineer, Contractor
Hydrology and Floodplain				
No environmental commitments for hydrology and floodplain				
Water Quality				
WQ-1	In accordance with the Los Angeles County Municipal Storm Water National Pollutant Discharge Elimination System (NPDES) Permit, a storm water management program shall be implemented per the Municipal Separate Storm Sewer System (MS4) permit. For compliance with the Caltrans NPDES permit, a storm water management program shall be developed for pre-construction, construction, and post-construction best management practices (BMPs) in California Department of Transportation (Caltrans) right-of-way.	Permit, Standard Specs, DED	During Construction	Resident Engineer, Contractor
WQ-2	Work within Trancas Creek and Trancas Lagoon shall be scheduled to occur between May 2 and September 30 to avoid the rainy season.	DED	Design, During Construction	Project Biologist, Resident Engineer, Contractor
WQ-3	To reduce the potential for any potential runoff or run-on in the project area, construction site BMPs shall be installed prior to the start of construction. Additionally, the contractor shall be responsible for the implementation of BMPs including but not limited to:	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	• Runoff control measures shall be placed at the top of all excavation and embankment slopes.	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	• Slope protection/slope interruption devices shall be implemented on applicable slopes during the construction period and, wherever possible, early implementation of permanent erosion control seeding or landscape planting shall be performed.	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	• The contractor shall provide and maintain stabilized construction site entrances and exits throughout.	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	• Regular watering of non-paved sites shall be performed, along with regular street sweeping and vacuuming on paved surfaces.	Standard Specs, DED	During Construction	Resident Engineer, Contractor
• All slopes shall be protected with fiber rolls, silt fences, temporary slope drains, and early slope paving or landscaping as defined in the approved Storm Water Pollution Prevention Plan (SWPPP), especially during the rainy season from October 1 to May 1.	Standard Specs, DED	During Construction	Resident Engineer, Contractor	

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
	<ul style="list-style-type: none"> The total active disturbed soil area (DSA) in the proposed project limits will be maintained to a minimum by focusing on construction activities that avoid earthwork and by implementing the approved construction site BMPs. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	<ul style="list-style-type: none"> The contractor will be required to manage all stock piles against wind and water erosion and contain concrete wastes with concrete washouts. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	<ul style="list-style-type: none"> All catch basins and drainage inlets will include gravel bag berms or storm drain inlet protection. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	<ul style="list-style-type: none"> For all construction equipment, fuels, and toxic chemicals, spill prevention and spill control measures will be implemented throughout the duration of construction. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	<ul style="list-style-type: none"> No heavy construction equipment should be stored on the beach zone, and all heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in non-operating status. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	<ul style="list-style-type: none"> A "Wash-out Pan" should be used to wash down any equipment that handles concrete or other chemical-based construction materials. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
Geology and Soils				
No environmental commitments for geology and soils.				
Hazardous Waste				
HW-1	A project-specific Lead Compliance Plan and Debris Containment and Disposal Work Plan will be prepared to address the removal, containment, storage, sampling, transport, and disposal of yellow thermoplastic and lead-based painted traffic stripe and/or pavement markings, and to prevent or minimize worker exposure to lead while handling the debris/residue (California Code of Regulations [CCR], Title 8, Section 1532.1, "Lead," and California Occupational Safety and Health Administration [Cal/OSHA] Construction Safety Order).	DED	Design, During Construction	Resident Engineer, Contractor
HW-2	The California Department of Transportation (Caltrans) Office of Environmental Engineering will initiate a project-specific aerially deposited lead (ADL) site investigation to evaluate whether the excess ADL spoils generated can be reused on the project site and/or along the project corridor by adhering to the requirements of the Soil Management Agreement for Aerially Deposited Lead-Contaminated Soils (ADL Agreement) that the Department entered into with the California Department of Toxic Substances Control (July 2016). If the excess ADL soils cannot be reused on the project site and/or along the project corridor, the site investigation will also determine whether they are classified as federal or state hazardous waste that requires off-site disposal at a permitted Class I California hazardous waste disposal facility or can be relinquished to the contractor with or without restrictions on land use.	DED	Design, During Construction	Resident Engineer, Contractor
HW-3	The site investigation data will be used to prepare a Lead Compliance Plan as required under CCR Title 8, Section 1532.1, "Lead," and the Cal/OSHA Construction Safety Order.	DED	Design, During Construction	Hazardous Waste Unit, Resident Engineer, Contractor
HW-4	An Excavation and Transportation Plan will be prepared to establish the procedures that will be used to comply with requirements for excavating, stockpiling, transporting, and placing or disposing of material containing ADL.	DED	Design, During Construction	Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
HW-5	Removal and disposal of metal beam guardrail wood posts shall be managed under CCR Title 22, Division 4.5, Chapter 34, which specifies guidelines for storage, accumulation, shipment/transport, and disposal of treated wood waste at specific landfills.	DED	During Construction	Resident Engineer, Contractor
HW-6	Surveying and sampling will be required to determine procedures for the proper removal, handling, and disposal of asbestos-containing materials (ACM) and lead-based paint (LBP) during construction. Upon completion and analyses of surveys and sampling, an Asbestos Compliance Plan, Asbestos Removal Work Plan, and Lead-Based Paint Compliance Plan, and Lead-Based Paint Removal Work Plan shall be completed and signed by a Certified Industrial Hygienist that outlines potential risks and appropriate monitoring plans, as well as safety measures, to reduce the risk of worker exposure to contamination.	DED	Design, During Construction	Hazardous Waste Unit, Resident Engineer, Contractor
HW-7	A Dust Control Plan will be prepared and approved by the South Coast Air Quality Management District (SCAQMD) before commencing any work in areas containing ACM. The Dust Control Plan will outline procedures to prevent dust emission during excavation, stockpiling, transportation, or placement of materials containing ACM.	DED	Design, During Construction	Resident Engineer, Contractor
HW-8	Removal and management of LBP during bridge demolition will be addressed in a project-specific Lead Compliance Plan.	DED	Design, During Construction	Resident Engineer, Contractor
HW-9	Groundwater testing will be required during the final design phase to determine the extent of potential contamination in groundwater that will be encountered during construction, and to confirm whether contamination, if any, can be attributed to nearby sources and impacts from previous releases.	DED	Design, During Construction	Hazardous Waste Unit, Resident Engineer, Contractor
HW-10	Additional site investigation work is required to include sampling to evaluate any residual concentrations of contamination that may be present on each site and within Caltrans right-of-way. The results of the additional site investigations will be used to prepare the appropriate remediation cost estimates to manage, handle, and dispose of any impacted soils during construction and following construction, should long-term monitoring or remedial actions be required.	DED	During Construction	Hazardous Waste Unit, Resident Engineer, Contractor
Air Quality				
AQ-1	The construction contractor shall comply with the Caltrans Standard Specifications in Section 14 (2010).	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	<ul style="list-style-type: none"> Section 14-9.01 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including South Coast Air Quality Management District (SCAQMD) rules and regulations and local ordinances. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
	<ul style="list-style-type: none"> Section 14-9.02 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18. 	Standard Specs, DED	During Construction	Resident Engineer, Contractor
AQ-2	Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the right-of-way line as required by SCAQMD.	DED	During Construction	Resident Engineer, Contractor

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ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
AQ-3	Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas.	DED	During Construction	Resident Engineer, Contractor
AQ-4	Wash trucks as they leave the project site as necessary to control fugitive dust emissions.	DED	During Construction	Resident Engineer, Contractor
AQ-5	Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.	DED	During Construction	Resident Engineer, Contractor
AQ-6	Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.	DED	During Construction	Resident Engineer, Contractor
AQ-7	Locate equipment and materials storage sites at least 500 feet from the sensitive receptors.	DED	During Construction	Resident Engineer, Contractor
AQ-8	Keep construction areas clean and orderly.	DED	During Construction	Resident Engineer, Contractor
AQ-9	Establish environmentally sensitive areas or their equivalent at least 500 feet away from sensitive air receptors within which construction activities (e.g., extended idling, material storage, and equipment maintenance) would be prohibited, to the extent feasible.	DED	Design, During Construction	Resident Engineer, Contractor
AQ-10	Use track-out reduction measures (e.g., gravel pads) at project access points to minimize dust and mud deposits on roads affected by construction traffic.	DED	During Construction	Resident Engineer, Contractor
AQ-11	Cover all transported loads of soils and wet materials prior to transport or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (PM) during transportation.	DED	During Construction	Resident Engineer, Contractor
AQ-12	Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease PM.	DED	During Construction	Resident Engineer, Contractor
AQ-13	Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.	DED	During Construction	Resident Engineer, Contractor
AQ-14	Install mulch or plant vegetation as soon as is practical after grading to reduce windblown particulate in the area. Be aware that certain methods of mulch placement (e.g., straw blowing) may themselves cause dust and visible emission issues, and may need to use controls (e.g., dampened straw).	DED	During Construction	Resident Engineer, Contractor
Noise				
NOI-1	All equipment shall have sound-control devices that are no less effective than those provided on the original equipment. No equipment shall have an un-muffled exhaust.	Standard Specs, DED	During Construction	Resident Engineer, Contractor
NOI-2	As directed by the Caltrans Resident/Project Engineer, the contractor shall implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.	Standard Specs, DED	During Construction	Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
NOI-3	All work shall adhere to Caltrans Standard Specifications, Section 7 1.011, "Sound Control Requirements," which states that noise levels generated during construction will comply with applicable local, State, and federal regulations, and that all equipment will be fitted with adequate mufflers according to the manufacturers' specifications.	Standard Specs, DED	During Construction	Resident Engineer, Contractor
NOI-4	Noise control shall conform to the provisions in Section 14-8.02, "Noise Control," of the Caltrans Standard Specifications.	Standard Specs, DED	During Construction	Resident Engineer, Contractor
Natural Communities				
NC-1	Temporary Construction Easements (TCEs) will be obtained to provide the contractor with construction access on both sides of Pacific Coast Highway (PCH). The boundaries of the TCEs will be fenced, and construction activity will not be allowed to occur beyond these limits.	DED	Design, During Construction	Right-of-Way Technician, Resident Engineer, Contractor
NC-2	Most of the foredunes complex shall be delineated and identified as an Environmentally Sensitive Area (ESA) (a small portion will be affected by construction equipment as it enters/exits the beach). ESA fencing shall be installed and maintained during construction of the southbound lanes on the beach side of the bridge. A qualified biologist will oversee the installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.	DED	Design, During Construction	Project Biologist, Resident Engineer, Contractor
NC-3	The existing foredune habitat will be restored per California Department of Fish and Wildlife (CDFW) and/or California Coastal Commission permitting requirements.	Permit, DED	During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Restoration shall include restoring dune contours on Trancas Beach and replanting coastal dune flora species: red sand verbena, dune primrose, and dune beach grasses. 	Permit, DED	Post-Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • This area shall remain protected for a minimum of 2 years post-restoration to allow for regrowth of slow-growing dune species. 	Permit, DED	Post-Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Educational and directional signs shall be installed to designate this sensitive area and guide people away from the area. 	Permit, DED	During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
NC-4	The sandbar willow scrub shall be delineated and identified as an ESA. ESA fencing shall be installed and maintained during construction to prevent intrusion into this area. A qualified biologist will oversee installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.	DED	Design, During Construction	Project Biologist, Resident Engineer, Contractor
NC-5	No heavy construction equipment will be stored on the beach.	DED	During Construction	Resident Engineer, Contractor
NC-6	Heavy equipment will be checked daily for leaks to avoid contamination. Drip pans will be placed under heavy equipment at the end of each day.	DED	During Construction	Resident Engineer, Contractor
NC-7	Following construction, all beach contours will be regraded to their original condition.	DED	During Construction	Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
Wetlands and Other Waters				
WW-1	To reduce impacts to waters of the United States (U.S.) and waters of the State, all work within Trancas Creek and Trancas Lagoon should be performed between April 1 and November 1 to avoid the rainy season.	DED	During Construction	Resident Engineer, Contractor
WW-2	A water diversion plan shall be developed and implemented to reduce potential impacts to water quality.	DED	During Construction	Project Biologist, Resident Engineer, Contractor
WW-3	The Temporary Construction Easement (TCE) shall be delineated by an Environmentally Sensitive Area (ESA) fence that will be checked daily and maintained throughout the life of the project. If a breach should occur in the ESA fence, the Resident Engineer shall be contacted immediately.	DED	During Construction	Project Biologist, Resident Engineer, Contractor
WW-4	No construction equipment shall be operated outside the TCE.	DED	During Construction	Resident Engineer, Contractor
WW-5	All equipment entering and exiting waters of the U.S. or waters of the State shall be washed down before and after daily operation to reduce the potential spread of nonnative or invasive species.	DED	During Construction	Resident Engineer, Contractor
WW-6	All heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in non-operating status.	DED	During Construction	Resident Engineer, Contractor
WW-7	A "Wash-out Pan" shall be used to wash down any equipment that handles concrete or other chemical-based construction materials.	DED	During Construction	Resident Engineer, Contractor
WW-8	Compensatory mitigation will be required for permanent impacts of 0.12 acre per the permits from the California Department of Fish and Wildlife (CDFW). Final details of compensatory mitigation will be determined with acceptance of signed permits. Typically, mitigation ratios range from 3:1 for riparian impacts to as high as 5:1 for wetland impacts. The California Department of Transportation (Caltrans) will perform on site mitigation to the extent feasible to restore 1.29 acres of temporarily impacted jurisdictional delineation wetlands and waters (Riverine & Seasonal Marshland) habitat as well as the sensitive coastal foredune habitat (if impacted). All impact resulting from construction equipment and disturbance of jurisdictional habitat and sensitive habitat must be restored and/or mitigated.	Permits, DED	Pre-Construction, During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
Plant Species				
PS-1	Most of the foredunes complex shall be delineated and identified as an Environmentally Sensitive Area (ESA) (a small portion will be affected by construction equipment as it enters/exits the beach). ESA fencing shall be installed and maintained during construction of the southbound lanes on the beach side of the Trancas Creek Bridge. A qualified biologist will oversee the installation of the fencing to ensure proper installation and delineation of the protected ESA boundary.	DED	During Construction	Project Biologist, Resident Engineer, Contractor
PS-2	The existing foredune habitat will be restored per California Department of Fish and Wildlife (CDFW) and/or per City of Malibu through the Local Coastal Development Permit process, under the delegation of the California Coastal Commission.	Permit, DED	During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
	<ul style="list-style-type: none"> Restoration shall include restoring dune contours on Trancas Beach and replanting coastal dune flora species: red sand verbena, dune primrose, and dune beach grasses. 	Permit, DED	During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> This area shall remain protected for a minimum of 2 years post-restoration to allow for regrowth of slow-growing dune species. 	Permit, DED	During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> Educational and directional signs shall be installed to designate this sensitive area and guide people away from the area. 	Permit, DED	During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
Animal Species				
AS-1	Construction activity, including vegetation removal and bridge demolition, shall be scheduled to occur between September 2 and February 14 to avoid the bird nesting season. If that is not feasible, the California Department of Transportation (Caltrans) Biologist shall be notified at least 2 weeks in advance so that preconstruction nesting bird surveys can be conducted. If nesting birds are observed, construction activity in the immediate area shall not occur until it is determined that the young birds have left the nest. A buffer zone shall be established and maintained during all phases of construction (150 feet for songbirds and 500 feet for raptors) to ensure that nesting birds are not adversely affected.	DED	During Construction	Project Biologist, Resident Engineer, Contractor
AS-2	Delineation of the Temporary Construction Easement (TCE) and monitoring as described in Section 2.17 for the western snowy plover will be carried out in order to prevent equipment and personnel from encroaching upon shorebird foraging habitat.	DED	During Construction	Project Biologist, Resident Engineer, Contractor
AS-3	If noise levels from construction exceeds 60 decibels (dB) at the edge of the TCE (110 feet from the edge of the bridge zone), then a sound barrier/blanket will be erected to minimize construction noise impacts.	DED	During Construction	Project Biologist, Resident Engineer, Contractor
Threatened and Endangered Species				
TE-1	The Temporary Construction Easement (TCE) will be delineated, fenced off, and monitored by a District Biologist from the California Department of Transportation (Caltrans) Division of Environmental Planning or a qualified on-call biologist during the nesting and breeding season (March 1 to September 30), as well as during the wintering season (October 1 to February 28). During normal construction activity, the biologist will monitor daily for western snowy plover eggs, nests, or nesting behavior in the project construction zone within the TCE. If any snowy plover eggs are discovered or individuals demonstrate nesting behavior within the TCE, or if any snowy plovers are observed in the construction zone during the non-breeding season, all work will stop until the fledglings and/or adults have vacated the area. The Ventura Fish and Wildlife Office will be called to inform staff of nesting activity and potential re initiation of Section 7 consultation. Biologists have the authority to stop all construction activity and will be in charge of the monitoring activity. If an on-call biologist is used, they must report daily activities to the Caltrans biologist.	DED	During Construction	Project Biologist, Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
TE-2	Duties of the on-call biologist will include:	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Checking for nesting or roosting behavior prior to the start of work for each operational day; 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Ensuring beach equipment operators are current with western snowy plover awareness training for beach work operation; 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Checking western snowy plover fencing for any damage, breaks, or openings; 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Completing a daily log report to be turned into the Resident Engineer and Caltrans Office; 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Ensuring local citizens are aware of western snowy plover activity in the area and providing western snowy plover awareness material to beach goers; and 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Informing Los Angeles County Beaches and Los Angeles County Lifeguards of western snowy plover activity if any individuals are observed. 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
TE-3	If nesting behavior and/or a nest is discovered, the following procedures will be initiated:	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • If eggs or nests are discovered, then additional fencing will be installed with a minimum radius of 150 feet from the nest, and all construction activity will halt until the young have fledged; 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • Nests will be monitored daily and a daily western snowy plover log sheet of activity will be completed and turned into the Resident Engineer, and a copy sent to the Caltrans District 7 Office; and 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • If eggs or nests are discovered, then Ventura Fish and Wildlife Office staff will be notified as soon as possible for updates and additional guidance. 	DED	During Construction	Project Biologist, Resident Engineer, Contractor
TE-4	Construction activity on the beach will be minimized to the extent feasible.	Permit, DED	During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> • If feasible, construction on the beach zone will occur outside of bird nesting season (September 30 to March 1). 	DED	During Construction	Project Biologist, Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
	<ul style="list-style-type: none"> The TCE will be maintained until construction ends and is defined by the Caltrans Design Engineer. Caltrans will coordinate with the United States Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), and the California Coastal Commission for feedback on beach zone activity and necessary coastal zone protection requirements. 	Permit, DED	Design, During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> The construction staging area will be located on either the north side of Pacific Coast Highway (PCH) (open land east of Trancas Creek) or on the west end of the Zuma Beach parking lot. 	DED	During Construction, Post-Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> During construction, equipment will not be allowed to be stored on the beach. 	DED	During Construction, Post-Construction	Resident Engineer, Contractor
TE-5	Caltrans will present a western snowy plover awareness training program to all construction staff that may use the beach zone for construction activity. This program will describe the following information:	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> The behavior of the western snowy plover and its distribution and habitat on Zuma Beach, 	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> Threats to western snowy plover, 	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> The detrimental effects of feeding wildlife, 	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> The penalties for disobeying restrictions, 	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> A map showing the TCE zone and proper Best Management Practices (BMPs) for minimizing beach impact, 	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> The proper procedure to address injured or dead western snowy plovers, and 	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
	<ul style="list-style-type: none"> The contact information of the Caltrans District Biologist and Resident Engineer. 	DED	Pre-Construction, During Construction	Project Biologist, Resident Engineer, Contractor
TE-6	If noise levels from construction exceed 60 decibels (dB) at the edge of the TCE (110 feet from the edge of the bridge zone), then a sound barrier/blanket will be erected to minimize construction noise impacts.	DED	During Construction	Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
Invasive Species				
IS-1	In compliance with Executive Order (EO) 13112 regarding Invasive Species as well as guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control included in the project will not use species listed as invasive. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.	DED	During Construction	Resident Engineer, Contractor
Construction Impacts				
CI-1	Runoff control measures shall be placed at the top of all excavation and embankment slopes.	DED	During Construction	Resident Engineer, Contractor
CI-2	Whenever possible, every effort shall be made to schedule work inside the Trancas Lagoon and earth-disturbing activities outside of anticipated rain events.	DED	During Construction	Resident Engineer, Contractor
CI-3	Slope protection/slope interruption devices shall be implemented on applicable slopes during the construction period. Wherever possible, early implementation of permanent erosion control seeding or landscape planting shall be performed.	DED	During Construction	Resident Engineer, Contractor
CI-4	The Contractor shall provide and maintain stabilized construction site entrances and exits throughout.	DED	During Construction	Resident Engineer, Contractor
CI-5	Regular watering of non-paved sites along with regular street sweeping and vacuuming of paved surfaces	DED	During Construction	Resident Engineer, Contractor
CI-6	All slopes shall be protected with fiber rolls, silt fences, temporary slope drains, and early slope paving or landscaping as defined in the approved Storm Water Pollution Prevention Plan (SWPPP), especially during the rain season from October 1 to May 1.	DED	During Construction	Resident Engineer, Contractor
CI-7	The total active disturbed soil area within the proposed project limits will be maintained to a minimum by focusing on construction activities that avoid earthwork and by implementing the approved construction site Best Management Practices (BMPs).	DED	During Construction	Resident Engineer, Contractor
CI-8	The contractor will be required to manage all stockpiles against wind and water erosion and contain concrete wastes with concrete washouts.	DED	During Construction	Resident Engineer, Contractor
CI-9	All catch basins and drainage inlets will include gravel bag berms or storm drain inlet protection.	DED	During Construction	Resident Engineer, Contractor
CI-10	For all construction equipment, fuels, and toxic chemical spills, prevention and spill control measures will be implemented throughout construction.	DED	During Construction	Resident Engineer, Contractor
CI-11	No heavy construction equipment shall be stored on the beach zone. All heavy equipment shall have oil drip pans placed underneath the oil pans while parked or in a non-operating status.	DED	During Construction	Resident Engineer, Contractor
CI-12	A wash-out pan should be used to wash down any equipment that handles concrete or other chemical-based construction materials.	DED	During Construction	Resident Engineer, Contractor
CI-13	All construction activities are to occur between the hours of 6:00 a.m. and 9:00 p.m., and shall not exceed 86 A-weighted decibels (dBA) at a distance of 50 feet. No construction activity is expected to occur on Sundays or on legal holidays. Construction noise will comply with the City of Malibu noise ordinance.	DED	During Construction	Resident Engineer, Contractor

Environmental Commitments Record

ID	Description of Commitment	Commitment Source (DED/Permits/ Specs/Plans/Estimates)	Timing/Phase	Responsible Party
CI-14	During bird nesting season (February 15 to September 1), Pre-project Bird Nesting Surveys will be conducted prior to any clearing and grubbing activity. If feasible within the project's schedule and timing, perform clearing and grubbing activity during the non-bird nesting period (September 2 to February 14).	DED	Pre-Construction, During Construction	Project Engineer, Resident Engineer, Contractor
CI-15	All equipment entering and exiting riparian and/or wetland areas must be washed down before and after daily operation to remove any potential nonnative or invasive seeds or soil that may contain invasive species.	DED	During Construction	Project Engineer, Resident Engineer, Contractor
Cumulative Impacts				
No environmental commitments for cumulative impacts.				
Climate Change Under CEQA				
No environmental commitments for climate change under CEQA.				

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Appendix G Acronyms and Abbreviations

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AADT	average annual daily traffic
AB	Assembly Bill
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
AEP	Association of Environmental Professionals
AIA	additional impervious areas
APE	Area of Potential Effects
AQMD	Air Quality Management District
ARB	California Air Resources Board
Basin	South Coast Air Basin
BFE	base flood elevation
BMP	best management practice
BSA	Biological Study Area
CAA	Clean Air Act
CAAA	federal Clean Air Act Amendments of 1990
CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Safety and Health Administration
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act

CFR	Code of Federal Regulations
City	City of Malibu
cm	centimeter(s)
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO Protocol	Transportation Project-Level Carbon Monoxide Protocol
CO-CAT	The Coastal Ocean Climate Action Team
CTP	California Transportation Plan
CWA	Clean Water Act
CZMA	Coastal Zone Management Act of 1972
dB	decibel(s)
dBA	A-weighted decibel(s)
DDT	dichlorodiphenyltrichloroethane
diesel PM	diesel particulate matter
DSA	disturbed soil area
DSRA	Disturbed Sensitive Resource Area
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Environmentally Sensitive Area
ESHA	Environmentally Sensitive Habitat Area
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FTA	Federal Transportation Improvement Programs
FTIP	Federal Transportation Improvement Program

GHG	greenhouse gas
H ₂ S	hydrogen sulfide
HEI	Health Effects Institute
iPAC	Information, Planning, and Conservation System
IPCC	Intergovernmental Panel on Climate Change
IRIS	Integrated Risk Information System
IS/EA	Initial Study/Environmental Assessment
ISCC	Invasive Species Council of California
ITS	Intelligent Transportation Systems
LARWQCB	Los Angeles Regional Water Quality Control Board
LAX	Los Angeles International Airport
LBP	lead-based paint
LCP	local coastal program
LEDPA	least environmentally damaging practicable alternative
L _{eq}	equivalent noise level
L _{eq} (h)	equivalent noise level measured for 1-hour period(s)
LIP	Local Implementation Plan
LUP	Land Use Plan
MLCP	Malibu Local Coastal Program
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MS4	municipal separate storm sewer systems
MSAT	mobile-source air toxics
MTIP	Metropolitan Transportation Improvement Plan
MUN	Municipal and Domestic Supply
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NATA	National Air Toxics Assessment
NAV	Navigation
NBI	National Bridge Inspection
ND	Negative Declaration
NEPA	National Environmental Policy Act

NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries Service	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O ₃	ozone
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act
OSTP	Office of Science and Technology Policy
PA	First Amended Section 106 Programmatic Agreement
PB	lead
PCB	polychlorinated biphenyl
PCH	Pacific Coast Highway
PDT	Project Development Team
pH	percentage of hydrogen
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns in size
PM _{2.5}	particulate matter less than 2.5 microns in size
ppm	parts per million
PRC	Public Resources Code
RARE	Rare, Threatened or Endangered Species
RCD-SMM	Resource Conservation District of the Santa Monica Mountains
RCRA	Resource Conservation and Recovery Act of 1976
REC	recognized environmental condition
REC-1	Water Contact Recreation (except areas channelized in concrete)
REC-2	Non-Contact Water Recreation
Resources Agency	California Natural Resources Agency
RSA	Resource Study Area

RSP	rock slope protection
RTP	Regional Transportation Plan
RTPAs	Regional Transportation Planning Agencies
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO ₃	sulfur trioxide
SO _x	sulfur oxide
SR-1	State Route 1
SR-23	State Route 23
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	Temporary Construction Easement
TMDL	total maximum daily load
TMP	Traffic Management Plan
TSCA	Toxic Substances Control Act
TWW	treated wood waste
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VMT	vehicle miles traveled

VOC	volatile organic compounds
WARM	Warm Freshwater Habitat
WDR	Waste Discharge Requirement
WILD	Wildlife Habitat
WPCP	Water Pollution Control Plan

Appendix H Species Lists

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United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ventura Fish and Wildlife Office
2493 PORTOLA ROAD, SUITE B
VENTURA, CA 93003

PHONE: (805)644-1766 FAX: (805)644-3958



Consultation Code: 08EVEN00-2017-SLI-0015

February 17, 2017

Event Code: 08EVEN00-2017-E-00439

Project Name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed list identifies species listed as threatened and endangered, species proposed for listing as threatened or endangered, designated and proposed critical habitat, and species that are candidates for listing that may occur within the boundary of the area you have indicated using the U.S. Fish and Wildlife Service's (Service) Information Planning and Conservation System (IPaC). The species list fulfills the requirements under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Please note that under 50 CFR 402.12(c) of the regulations implementing section 7 of the Act, the species list should be verified after 90 days. We recommend that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists following the same process you used to receive the enclosed list. Please include the Consultation Tracking Number in the header of this letter with any correspondence about the species list.

Due to staff shortages and excessive workload, we are unable to provide an official list more specific to your area. Numerous other sources of information are available for you to narrow the list to the habitats and conditions of the site in which you are interested. For example, we recommend conducting a biological site assessment or surveys for plants and animals that could help refine the list.

If a Federal agency is involved in the project, that agency has the responsibility to review its proposed activities and determine whether any listed species may be affected. If the project is a major construction project*, the Federal agency has the responsibility to prepare a biological assessment to make a determination of the effects of the action on the listed species or critical habitat. If the Federal agency determines that a listed species or critical habitat is likely to be adversely affected, it should request, in writing through our office, formal consultation pursuant to section 7 of the Act. Informal consultation may be used to exchange information and resolve

conflicts with respect to threatened or endangered species or their critical habitat prior to a written request for formal consultation. During this review process, the Federal agency may engage in planning efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

Federal agencies are required to confer with the Service, pursuant to section 7(a)(4) of the Act, when an agency action is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat (50 CFR 402.10(a)). A request for formal conference must be in writing and should include the same information that would be provided for a request for formal consultation. Conferences can also include discussions between the Service and the Federal agency to identify and resolve potential conflicts between an action and proposed species or proposed critical habitat early in the decision-making process. The Service recommends ways to minimize or avoid adverse effects of the action. These recommendations are advisory because the jeopardy prohibition of section 7(a)(2) of the Act does not apply until the species is listed or the proposed critical habitat is designated. The conference process fulfills the need to inform Federal agencies of possible steps that an agency might take at an early stage to adjust its actions to avoid jeopardizing a proposed species.

When a proposed species or proposed critical habitat may be affected by an action, the lead Federal agency may elect to enter into formal conference with the Service even if the action is not likely to jeopardize or result in the destruction or adverse modification of proposed critical habitat. If the proposed species is listed or the proposed critical habitat is designated after completion of the conference, the Federal agency may ask the Service, in writing, to confirm the conference as a formal consultation. If the Service reviews the proposed action and finds that no significant changes in the action as planned or in the information used during the conference have occurred, the Service will confirm the conference as a formal consultation on the project and no further section 7 consultation will be necessary. Use of the formal conference process in this manner can prevent delays in the event the proposed species is listed or the proposed critical habitat is designated during project development or implementation.

Candidate species are those species presently under review by the Service for consideration for Federal listing. Candidate species should be considered in the planning process because they may become listed or proposed for listing prior to project completion. Preparation of a biological assessment, as described in section 7(c) of the Act, is not required for candidate species. If early evaluation of your project indicates that it is likely to affect a candidate species, you may wish to request technical assistance from this office.

Only listed species receive protection under the Act. However, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Wildlife's Natural Diversity Data Base. You can contact the California Department of Fish and Wildlife at (916) 324-3812 for information on other sensitive species that may occur in this area.

[*A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2))

(c). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.]

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

Official Species List

Provided by:

Ventura Fish and Wildlife Office
2493 PORTOLA ROAD, SUITE B
VENTURA, CA 93003
(805) 644-1766

Consultation Code: 08EVEN00-2017-SLI-0015

Event Code: 08EVEN00-2017-E-00439

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

Project Description: Replace aging Trancas Cr. Bridge on PHC, LA-1.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

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United States Department of Interior
Fish and Wildlife Service

Project name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-118.84263038635254 34.0294023719161, -118.84132146835326 34.03128735497412, -118.84047389030455 34.0308161131356, -118.84194374084473 34.02898446905757, -118.84263038635254 34.0294023719161)))

Project Counties: Los Angeles, CA

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United States Department of Interior
Fish and Wildlife Service

Project name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

Endangered Species Act Species List

There are a total of 20 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog (<i>Rana draytonii</i>) Population: Wherever found	Threatened	Final designated	
Birds			
California Least tern (<i>Sterna antillarum browni</i>) Population: Wherever found	Endangered		
Coastal California gnatcatcher (<i>Polioptila californica californica</i>) Population: Wherever found	Threatened	Final designated	
Least Bell's vireo (<i>Vireo bellii pusillus</i>) Population: Wherever found	Endangered	Final designated	
Marbled murrelet (<i>Brachyramphus marmoratus</i>) Population: U.S.A. (CA, OR, WA)	Threatened	Final designated	
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Wherever found	Endangered	Final designated	

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United States Department of Interior
Fish and Wildlife Service

Project name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

western snowy plover (<i>Charadrius nivosus ssp. nivosus</i>) Population: Pacific Coast population DPS- U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast)	Threatened	Final designated	
Crustaceans			
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>) Population: Wherever found	Endangered	Final designated	
Vernal Pool fairy shrimp (<i>Branchinecta lynchi</i>) Population: Wherever found	Threatened	Final designated	
Fishes			
Tidewater goby (<i>Eucyclogobius newberryi</i>) Population: Wherever found	Endangered	Final designated	
Flowering Plants			
Braunton's milk-vetch (<i>Astragalus brauntonii</i>) Population: Wherever found	Endangered	Final designated	
California Orcutt grass (<i>Orcuttia californica</i>) Population: Wherever found	Endangered		
Gambel's watercress (<i>Rorippa gambellii</i>) Population: Wherever found	Endangered		
Lyon's pentachaeta (<i>Pentachaeta lyonii</i>) Population: Wherever found	Endangered	Final designated	

<http://ecos.fws.gov/ipac>, 02/17/2017 03:37 PM



United States Department of Interior
Fish and Wildlife Service

Project name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

Marcescent dudleya (<i>Dudleya cymosa</i> <i>ssp. marcescens</i>) Population: Wherever found	Threatened		
Marsh Sandwort (<i>Arenaria</i> <i>paludicola</i>) Population: Wherever found	Endangered		
Salt Marsh bird's-beak (<i>Cordylanthus</i> <i>maritimus ssp. maritimus</i>) Population: Wherever found	Endangered		
Santa Monica Mountains dudleya (<i>Dudleya cymosa ssp. ovatifolia</i>) Population: Wherever found	Threatened		
Spreading navarretia (<i>Navarretia</i> <i>fossalis</i>) Population: Wherever found	Threatened	Final designated	
Verity's dudleya (<i>Dudleya verityi</i>) Population: Wherever found	Threatened		

<http://ecos.fws.gov/ipac>, 02/17/2017 03:37 PM



United States Department of Interior
Fish and Wildlife Service

Project name: LA-1 / TRANCAS CREEK BRIDGE REPLACEMENT

Critical habitats that lie within your project area

The following critical habitats lie fully or partially within your project area.

Birds	Critical Habitat Type
western snowy plover (<i>Charadrius nivosus ssp. nivosus</i>) Population: Pacific Coast population DPS-U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast)	Final designated

<http://ecos.fws.gov/ipac>, 02/17/2017 03:37 PM

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Appendix I Public Notices

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 897-0362
FAX (213) 897-0360
TTY 711
www.dot.ca.gov



*Serious Drought.
Serious drought.
Help save water!*

January 13, 2016

The Honorable Barbara Boxer
US Senate
501 I Street Suite 7-600
Sacramento, CA 95814

File: LA-1, PM 56.5/56.9
Project #: 0712000094 (EA: 291400)
Trancas Cr. Bridge Replacement Project

Dear Senator Boxer:

The California Department of Transportation (Caltrans) is formally initiating studies for the proposed Trancas Creek Bridge (Bridge No. 53-0027) Replacement Project located on State Route 1 (SR-1) in the City of Malibu, Los Angeles County, California. The project location, scoping meeting location, and parking lot location are shown on the map pictured on page two. The intent of the project is to ensure the safety of the traveling public. There may be short-term environmental impacts associated with construction which will be addressed in the CEQA/NEPA environmental document.

Based on preliminary environmental studies, the resulting environmental document is anticipated to be an Initial Study/Environmental Assessment (IS/EA) leading to a Mitigated Negative Declaration/Finding of No Significant Impact (MND/FONSI). Caltrans is currently soliciting written comments from elected officials, public agencies, private entities, and any interested/affected individuals who may want to express their opinions, concerns, and /or support for the project. Topics of concern regarding the proposed project may include potential biological, visual, hydrology, noise, hazardous waste, coastal, cultural, and Section 4(f) issues. Any opinions pertaining to these issues are welcome and will be carefully considered. It would also be appreciated if any existing facilities or planned developments that may be either directly or indirectly impacted by this proposed project be brought to our attention.

A public scoping meeting will be held on the proposed project and the environmental process. The meeting will be held on Wednesday, January 27, 2016 from 6 p.m. to 8 p.m. at:

Malibu West Beach Club
6285 Pacific Coast Highway
Long Beach, CA 90803

Parking is available in a public lot on Trancas Canyon Road.

Written comments will be accepted at this workshop.

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Mr./Ms./Honorable Name
Date
Page 2

Caltrans strives to work cooperatively with all interested parties in an effort to exchange ideas and to ensure that all factors are considered, and a mutually acceptable project is constructed. Caltrans is pleased to have your ongoing participation in this endeavor. Please submit any written comments no later than February 27, 2016 to:

Mr. Karl Price, Senior Environmental Planner
California Department of Transportation
Division of Environmental Planning (Trancas Creek Bridge)
100 South Main Street MS-16A
Los Angeles, CA 90012

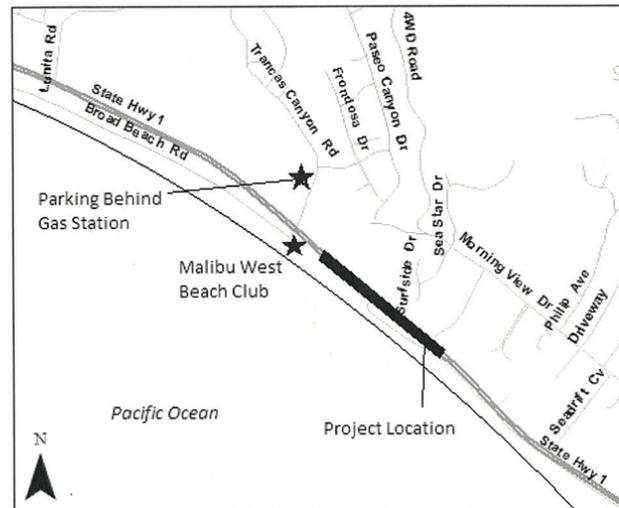
Thank you for your interest in this transportation improvement project.

Sincerely,



CARRIE L. BOWEN
District Director

LA-1/ Trancas Creek Bridge Replacement Project



"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

STATE OF CALIFORNIA – CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 MAIN STREET, MS16A
LOS ANGELES, CA 90012
PHONE (213) 897-0703
FAX (213) 897-0685
TTY (213) 897-4937
www.dot.ca.gov/dist07



*Serious Drought.
Help save water!*

January 5th, 2016

To: Agency Representatives and
Interested Individuals

File: LA-1, PM 56.5/56.9
Project #: 0712000094 (EA: 291400)
Trancas Creek Br. Replacement Project

Notice of Scoping/Initiation of Studies

The California Department of Transportation (Caltrans) is formally initiating studies for the proposed Trancas Creek Bridge (Bridge No. 53-0027) Replacement Project located on State Route 1 (SR-1) in the City of Malibu, Los Angeles County, California. The project location and scoping meeting location are shown on the attached map. The intent of the project is to ensure the safety of the traveling public. There may be short-term environmental impacts associated with construction which will be addressed in the environmental document.

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*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Scoping Notice for the Trancas Creek Bridge Replacement Project
Page 2 of 2

The Department will be pleased to have your ongoing participation in this endeavor. Please submit any written comments no later than February 27, 2016 to:

Mr. Karl Price, Senior Environmental Planner
California Department of Transportation
Division of Environmental Planning (Trancas Creek Bridge)
100 South Main Street MS-16A
Los Angeles, CA 90012

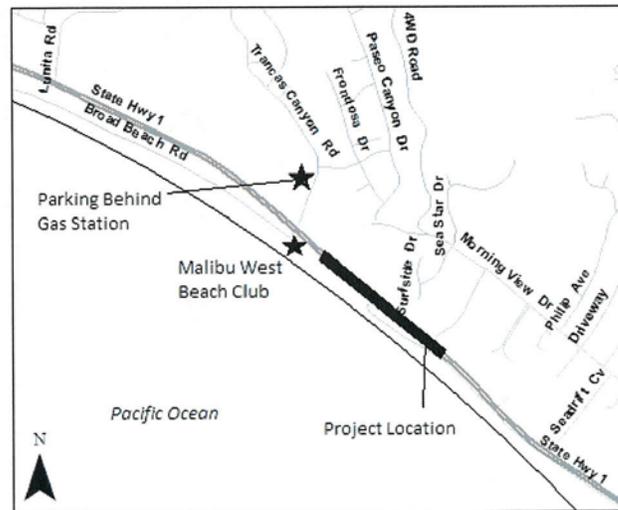
Thank you for your interest in this transportation improvement project.

Sincerely,



RONALD KOSINSKI
Deputy District Director
Division of Environmental Planning

State Route 1/ Trancas Creek Bridge Replacement Project



*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability."*



Dog trainer Melissa Otto (left) teaches Malibu boxer Cara, 1, how to sit. CHRIS BASHAW/2ND CENTURY MEDIA

Malibu dog Cara gets special lesson

STAFF REPORT

When other attendees of the City of Malibu's dog training lesson didn't show up for class on Thursday, Jan. 7, Malibu dog Cara, a 1-year-old boxer, got a special lesson.

Cara's owner, Sue Andresian, kept Cara on her leash while Melissa Otto of Pawsitively Perfect Pooches went over some basic commands with the Malibu resident.

Andresian watched and listened while Otto showed Cara how to sit, lay down

and touch her nose against Otto's palm.

Otto is a member of APDT and CGC certified trainer, and provided Andresian with other tips about how to care for Cara and ensure she maintains positive behavior and good health.



SCHNITZEL

Joshua, Zoë and Mandy Kafsky of Malibu

Schnitzel, our 1-year-old maltipoo, has three working legs and a stump with one nail for his front right "leg." Born with this defect, we adopted him four months ago. He is super happy and friendly and hops around happily with his other three working legs.



Would you like to see your pet featured as Malibu's Pet of the Week? Email your pet's photo, along with a few sentences about why your pet is outstanding to Chris at Chris@malibusurfsidenews.com

	<p align="center">Environmental Scoping Notice for Trancas Creek Bridge Replacement Project</p>
<p>What is Being Planned?</p> <p>The California Department of Transportation (Caltrans), District 7, proposes to replace the Trancas Creek Bridge (Bridge #53-0027) on Pacific Coast Highway (I.A-001) in the City of Malibu, Los Angeles County. A No Build Alternative, a Bridge Replacement - Short Alternative and a Bridge Replacement-Long Alternative have been proposed. The Bridge Replacement Alternatives propose to replace the existing bridge with a new bridge structure that maintains reliable access for the public. The new structure will include the replacement of all related roadway components. Temporary Construction Easements (TCE) for construction staging may be needed for both alternatives. A joint Initial Study/Environmental Assessment is being prepared pursuant to CEQA and NEPA, respectively. Caltrans is the lead agency under CEQA and NEPA.</p>	
<p>Why This Notice?</p> <p>Caltrans is initiating studies for this project. In order to better identify the issues to be addressed for the proposed project, Caltrans is soliciting comments from public agencies, private entities and interested individuals regarding potential social, economic, traffic, safety, environmental issues, and agency permit and review requirements related to the project.</p>	
<p>Where do you come in?</p> <p>There will be a public meeting/open house held for the project on January 27th, 2016 from 6:00pm - 8:00pm, at the Malibu West Beach Club. Parking is available in the public lot on Trancas Canyon Rd.</p> <p>Written comments will be accepted at the meeting. You may also send comments, suggestions or inquiries by February 27th, 2016 to:</p> <p>Mr. Karl Price, Senior Environmental Planner California Department of Transportation Division of Environmental Planning (Trancas Creek Bridge) 100 South Main Street, Mail Stop 16A Los Angeles, CA 90012</p>	
<p>Contact</p> <p>For more information about this project, call Mr. Karl Price at (213) 897-1839. TTY users may call 1-213-897-4937.</p>	
<p align="center"><i>Thank you for your interest!</i></p>	

News Briefs

Identity theft suspect arrested



Stolen items recovered from the home of Wilfredo Marquez, a Reseda man being investigated for a number of theft-related crimes.

On the morning of Thursday, Jan. 7, Malibu/Lost Hills Sheriff's Station detectives conducted a search warrant at a home in Reseda and recovered several hundred pieces of stolen mail, according to a release from Lieutenant James Royal of the Malibu/Lost Hills Sheriff's Station.

Thirty-two-year-old Wilfredo Marquez, a Reseda resident, was arrested for multiple counts of mail theft, identity theft, credit card fraud and other theft-related crimes, some of which have impacted Malibu residents.

Detectives found numerous credit cards, multiple stolen checks, personal identifying information, driver's licenses, mail box keys and other stolen property in Marquez's home.

Marquez was then transported to and booked at the Malibu/Lost Hills Sheriff's Station.

Assistance with the arrest was provided by investigators with the United States Postal Inspection Service, who will now be presenting the case to federal prosecutors.

The crimes occurred throughout Southern California cities over several months, including Malibu, Agoura Hills, Moorpark, Simi Valley and Canoga Park.

The United States Postal Inspection Service recovered the stolen mail and will be in contact with the victims in the near future, according to Royal.

Sirens

The following incidents were reported between 12/20/15 and 1/3/16:

12/20/26
Beach Burglary
 The owner of an apartment on Malibu Road noticed what appeared to be pry marks on the door frame and the door open while the residents of the apartment were out of town.

12/31
Canyon Crime
 A sliding glass door was shattered around 10 p.m. on Las Flores Canyon Road.

1/3
Diner Dilemma
 An \$800 farmhouse table was broken around 2 a.m. on Pacific Coast Highway

SMMEF raises over \$300,000 in December

During the month of December, the Santa Monica-Malibu Education Foundation (SMMEF) raised \$312,000 for the Santa Monica-Malibu Unified School District (SMMUSD) that will go into funding for Santa Monica and Malibu school programs.

Dun & Bradstreet led the way by providing a matching grant of \$90,000, which was followed by 394 individual gifts throughout December.

"We are so pleased with the community's tremendous response to the matching grant and grateful for Dun & Bradstreet's leadership," Kathleen Rawson, President of the SMMEF Board of Directors, wrote in a statement.

In addition to the matching grant, Dun & Bradstreet will also be donating an additional \$20,000 that will go into funding its high school internship and

college scholarship programs for SMMUSD students. In 2015, six high school students in the program received paid internships and were awarded college scholarships.

This is Dun & Bradstreet's third year in making SMMEF a beneficiary of its national EDAhead program, which was established to provide support to educational initiatives in the communities where Dun & Bradstreet offices are located.

PCH nighttime closures scheduled

The second northbound lane in the 22300 block of Pacific Coast Highway, between Carbon Mesa Road and Carbon Beach Terrace, will be closed Sunday through Thursday nights for the next four weeks due to night construction, according to an alert from the City of Malibu.

Closures will occur from 8 p.m. to 5 a.m. See News Briefs, page A12

Obituaries

Dave Lichten

Longtime Topanga Canyon resident Dave Lichten died after a battle with colon cancer in July 2015.

Lichten was born in Hollywood, Calif. in 1946. At the age of 13, he sailed to Israel with his mother and three younger siblings. He became a well-known musician and teacher, performing all over the country, both on radio and TV. He married his first wife at the age of 17 and had a daughter, Lizi, with her.

In 1971, he met Nira and they married soon after, and in 1977, they moved to the United States. They settled in Topanga Canyon in 1999, where they remained until his death last year.

On his first day in Topanga, Lichten met Alan Emerson at Pat's Grill and immediately joined the Aron Watch. He served with them until the end of his life.

"Dave was a true renaissance man," a loved one shared. He



was a guitarist, and also played all strings and other instruments. He composed and played improvised pieces on the piano.

Lichten was a chef, a painter, an avid photographer, a philosopher and raconteur.

"His impersonations and wit were legendary," a loved one said. But if you asked him what he did, he always said, "I'm a teacher." He was a teacher of music, arts and life, and many of his students became lifelong friends.

"David, when was the last time I told you 'I love you?'" Dan DiPaola, a close friend of Lichten, said. "You were the first person to make me cry uncontrollably from witnessing the beauty of your musical talent ... I will remember you, your humor, your music, your mystique, your intensity and your love of life. There are so many questions I didn't have the time to ask — your wisdom was priceless and still is ... You have done so much for so many, we all love you so much; you live on in our hearts. Love is forever."

Lichten is survived by his beloved Nira, two grandchildren, Or and Shachar, his sister Rachel and two brothers, Bob and Philip.

In Lichten's memory and to celebrate his 70th birthday, there will be a gathering at Topanga Community House, located at 1440 Topanga Canyon Blvd., on Sunday, May 22, 3-6p.m. All are welcome.

Dylan Gil-Gomez

Former Malibu resident Dylan Gil-Gomez passed away on Dec. 23, 2015 in San Francisco — the city in which he had resided for the past three years.

Gil-Gomez was born in Malibu and grew up locally. He attended Point Dume Marine Science Elementary, graduated from Malibu High School, and then studied at UC Santa Cruz and San Francisco State University.

"Like a true native, [he] loved the ocean and the mountains and the animals that share this beautiful place with us," a



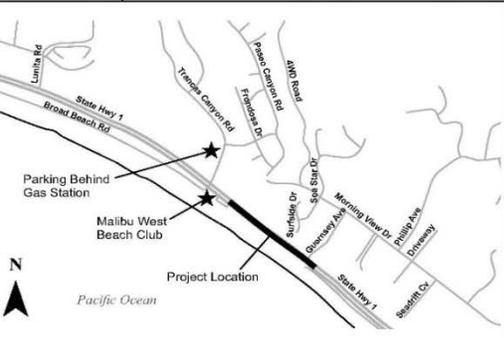
loved one said. Gil-Gomez was a musician, designer and craftsman in his

spare time.

"Our love for him knew no limits and he responded in kind," a loved one said. "His early death leaves a gaping hole in our very center. We wish to extend our gratitude to all our friends and acquaintances in the community who have reached out to us. We realize this is a difficult thing to do at this most terrible time, and our resolve to overcome this tragedy is strengthened by your love and support."

A memorial service is being planned for this spring.

Environmental Scoping Notice for Trancas Creek Bridge Replacement Project



What is Being Planned?

The California Department of Transportation (Caltrans), District 7, proposes to replace the Trancas Creek Bridge (Bridge #53-0027) on Pacific Coast Highway (LA-001) in the City of Malibu, Los Angeles County. A No Build Alternative, a Bridge Replacement – Short Alternative and a Bridge Replacement-Long Alternative have been proposed. The Bridge Replacement Alternatives propose to replace the existing bridge with a new bridge structure that maintains reliable access for the public. The new structure will include the replacement of all related roadway components. Temporary Construction Easements (TCE) for construction staging may be needed for both alternatives. A joint Initial Study/Environmental Assessment is being prepared pursuant to CEQA and NEPA, respectively. Caltrans is the lead agency under CEQA and NEPA.

Why This Notice?

Caltrans is initiating studies for this project. In order to better identify the issues to be addressed for the proposed project, Caltrans is soliciting comments from public agencies, private entities and interested individuals regarding potential social, economic, traffic, safety, environmental issues, and agency permit and review requirements related to the project.

Where do you come in?

There will be a public meeting/open house held for the project on **January 27th, 2016 from 6:00pm – 8:00pm, at the Malibu West Beach Club**. Parking is available in the public lot on Trancas Canyon Rd.

Written comments will be accepted at the meeting. You may also send comments, suggestions or inquiries by **February 27th, 2016 to:**

Mr. Karl Price, Senior Environmental Planner
 California Department of Transportation
 Division of Environmental Planning (Trancas Creek Bridge)
 100 South Main Street, Mail Stop 16A
 Los Angeles, CA 90012

Contact

For more information about this project, call Mr. Karl Price at (213) 897-1839. TTY users may call 1-213-897-4937.

Thank you for your interest!

What is being planned?

The California Department of Transportation (Caltrans) is proposing to replace the Trancas Creek Bridge on Pacific Coast Highway in the City of Malibu. A No Build Alternative and two Bridge Replacement Alternatives have been proposed. The replacement is proposed due to the age of the bridge and its vulnerability to scouring during a 10 year storm.



Why this notice?

Caltrans is initiating studies for this project. In order to better identify the issues to be addressed for the proposed project, Caltrans is soliciting comments from public agencies, private entities and interested individuals.

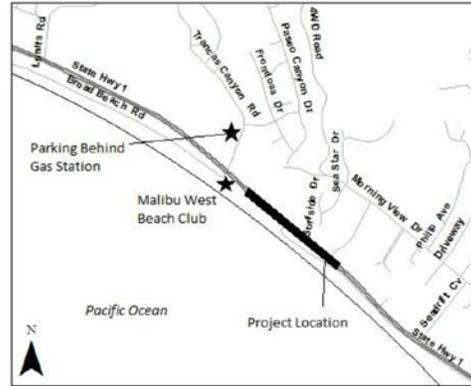
NOTICE OF PUBLIC SCOPING/OPEN HOUSE FOR THE TRANCAS CREEK BRIDGE REPLACEMENT PROJECT

January 27th, 2016
6:00 PM - 8:00 PM
Malibu West Beach Club
30756 Pacific Coast Hwy
Malibu, CA 90265

Parking is available in the public lot on Trancas Canyon Rd.

For more information about this project, call Mr. Karl Price at (213) 897-1839. TTY users may call (213) 897-4937.

Trancas Creek Bridge Replacement



Division of Environmental Planning
100 South Main Street, Mail Stop-16A
Los Angeles, CA 90012



**NOTICE OF PUBLIC SCOPING/
OPEN HOUSE FOR THE TRANCAS
CREEK BRIDGE REPLACEMENT
PROJECT**

CALTRANS

NOTICE OF AVAILABILITY AND PUBLIC HEARING NOTICE

Notice of Availability (NOA) of Draft Initial Study/Environmental Assessment (IS/EA) and Notice of Public Hearing for the Trancas Creek Bridge Replacement Project



What's Being Planned? The California Department of Transportation (Caltrans) proposes to improve the safety of the roadway prism by replacing the Trancas Creek Bridge (Bridge No. 53 0027) on Pacific Coast Highway (PCH) in the City of Malibu, Los Angeles County, California. This project will require new permanent and temporary Right-of-Way. Caltrans is the lead agency under the National Environmental Policy Act and under the California Environmental Quality Act.

Why This Notice? Caltrans has studied the effects that the proposed project may have on the environment and community. The results of these studies are contained in an environmental document known as a Draft Initial Study (IS)/Environmental Assessment (EA). The purpose of this notice is to inform the public of its completion and availability to any interested individuals, and to provide the public an opportunity to comment.

Where Can I View the Draft IS/EA? The Draft IS/EA is available for viewing and download at: <http://www.dot.ca.gov/d7/env-docs/> and the project website at: <http://www.dot.ca.gov/d7/projects/trancas/>. The Draft IS/EA will also be available for review at the Malibu Public Library (23519 West Civic Center Way, Malibu, CA 90265), the Malibu City Hall (23825 Stuart Ranch Road, Malibu, CA 90265) and the Caltrans District 7 Office (100 South Main Street, Los Angeles, CA 90012).

To Submit Comments on the Draft IS/EA: Have the potential impacts been addressed? Do you have information that should be included? Would you care to make any other comments on the project? Please submit your comments in writing no later than June 5, 2017 to: Mr. Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 S. Main Street, MS-16A, Los Angeles, CA 90012. For additional information, please contact Mr. Karl Price at (213) 897-1839, or via e-mail at karl.price@dot.ca.gov. Thank you for your interest in this important transportation project.

PUBLIC HEARING DETAILS:
Thursday, May 25, 2017 - 6:00 - 8:00 PM
Malibu West Beach Club
30756 Pacific Coast Highway, Malibu, CA 90265

QUESTIONS & COMMENTS:

-  <http://www.dot.ca.gov/d7/projects/trancas/>
-  (213) 897-1839
-  karl.price@dot.ca.gov



MHS robotics makes history, again

By Maya Silardi
Special to The Malibu Times

The Malibu High School (MHS) robotics team last week became one of the top teams in the world, up from a comparatively low (but still impressive) 77th ranking following the world championships in 2016.

The MHS robotics team placed 15th in its division, 11th in the world in its skills challenge, and No. 5 in the world for its programming skills — a sizeable improvement from its 77th place last year and a big accomplishment for the five-man team comprised of seniors Sam Burton, Izzy Putterman and Jaime Le, junior Louie Putterman, and freshman Ben Burton.

This past April 19-22, the MHS robotics team competed for the second time at the VEX Robotics World Championship in Louisville, Ken. and made school history.

"The competition went really well. We competed at a higher level than we have ever done before and we were able to out-compete the majority of other teams. Our record last year at Worlds was 3-7, which placed us in 77th place in our division. This year, we flipped that record, going 7-3, putting us in 15th place in our division," explained Le, who also competed last year in the tournament.

Through a series of round robin tournament matches, teams competed against each other and attempted to throw the most three-dimensional stars and cubes across a fence before time ran out. With challengers from around the globe, the MHS team fought hard to represent Malibu on the world stage.

"The whole event was a great experience," captain Sam Burton noted. "We competed with teams from across the globe, including China, the U.K. and the UAE. It was also good to reconnect with the teams we'd gotten to know through the season... One team we had competed with — and tied with before losing to them in the finals — went on to win the whole competition and become



From left, Jaime Le, Sam Burton, Ben Burton, Louie Putterman and Izzy Putterman. Photo courtesy of Brian Corrigan

the world champions." With international competitors came a whole new standard of competition. Putterman explained that the team was not only able to rise to meet the high standard, but was able to exceed it.

"There were definitely some brilliant robots that took the design approach to a new level," Izzy Putterman said.

First-time world competitors Louie Putterman and Ben Burton saw opportunities for MHS robotics' future. "[The tournament] was cool to see all the different teams with all their robots... It was fun being on the team this year, and hopefully next year we can get to worlds again," Ben Burton said.

Louie Putterman, who is following in his brothers' footsteps, is the third member of his family to make history on the MHS robotics team; his brothers Harry and Izzy both competed in the 2016 VEX Robotics World Championships. "It would be amazing for our robotics program to be able to reach the world championships three years in a row, but this will take a lot of work," said Louie Putterman.

With the help of coach John Burton, a lifelong programmer,

and advisor Brian Corrigan, the team was able to make their mark on the international level.

"Overall, I think in the end [this was] an improvement over last year... It just shows their dedication to the hundreds of hours they put in and John Burton put in. Just like last year, they worked a ton," noted Corrigan, who also teaches physics and engineering at MHS.

Those accomplishments did not come easy. With language barriers among the teams and primarily an initial issue with the state of the fields, which slowed many robots down, the MHS team was forced to think on their feet and quickly came up with alternative methods to continue on in the tournament, according to the Malibu team.

Malibu seniors are hopeful that the two-year-old MHS robotics team will continue on long after they graduate. "Jaime, Sam and I have brought the club to a good spot. Ben and Louie are going to lead the club next year and hopefully more people join in," Izzy Putterman said.

"My main hope is that this robotics program becomes a large and integral part of our campus and society of Malibu High," Le concluded.

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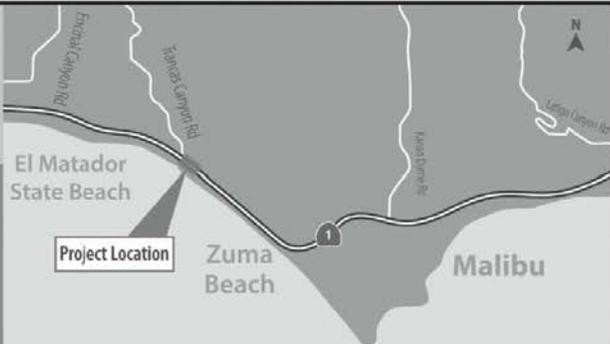
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Or Contact: mlong@mynewhondajet.com

CALTRANS NOTICE OF AVAILABILITY AND PUBLIC HEARING NOTICE

Notice of Availability (NOA) of Draft Initial Study/Environmental Assessment (IS/EA) and Notice of Public Hearing for the Trancas Creek Bridge Replacement Project



What's Being Planned? The California Department of Transportation (Caltrans) proposes to improve the safety of the roadway prism by replacing the Trancas Creek Bridge (Bridge No. 53 0027) on Pacific Coast Highway (PCH) in the City of Malibu, Los Angeles County, California. This project will require new permanent and temporary Right-of-Way. Caltrans is the lead agency under the National Environmental Policy Act and under the California Environmental Quality Act.

Why This Notice? Caltrans has studied the effects that the proposed project may have on the environment and community. The results of these studies are contained in an environmental document known as a Draft Initial Study (IS)/Environmental Assessment (EA). The purpose of this notice is to inform the public of its completion and availability to any interested individuals, and to provide the public an opportunity to comment.

Where Can I View the Draft IS/EA? The Draft IS/EA is available for viewing and download at: <http://www.dot.ca.gov/d7/env-docs/> and the project website at: <http://www.dot.ca.gov/d7/projects/trancas/>. The Draft IS/EA will also be available for review at the Malibu Public Library (23519 West Civic Center Way, Malibu, CA 90265), the Malibu City Hall (23825 Stuart Ranch Road, Malibu, CA 90265) and the Caltrans District 7 Office (100 South Main Street, Los Angeles, CA 90012).

To Submit Comments on the Draft IS/EA: Have the potential impacts been addressed? Do you have information that should be included? Would you care to make any other comments on the project? Please submit your comments in writing no later than June 5, 2017 to: Mr. Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 S. Main Street, MS-16A, Los Angeles, CA 90012. For additional information, please contact Mr. Karl Price at (213) 897-1839, or via e-mail at karl.price@dot.ca.gov. Thank you for your interest in this important transportation project.

Public Hearing Details:
Thursday, May 25, 2017 - 6:00-8:00 PM
Malibu West Beach Club
30756 Pacific Coast Highway, Malibu, CA 90265

Questions & Comments

www.dot.ca.gov/d7 (213) 897-1839 karl.price@dot.ca.gov



DEPARTMENT OF TRANSPORTATION

DISTRICT 7
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 897-0362
FAX (213) 897-0360
TTY 711
www.dot.ca.gov



*Making Conservation
a California Way of Life.*

May 4, 2017

The Honorable Dianne Feinstein
US Senate
11111 Santa Monica Boulevard Suite 915
Los Angeles, CA 90025

File: LA-1, PM 56.5/56.9
Project #: 0712000094 (EA: 291400)
Trancas Cr. Bridge Replacement Project

Notice of Public Hearing and Availability of Initial Study/ Environmental Assessment

The California Department of Transportation (Caltrans) has completed studies and issued a draft Initial Study/Environmental Assessment (IS/EA) for the proposed Trancas Creek Bridge (Bridge No. 53-0027) Replacement Project located on State Route 1 (SR-1) in the City of Malibu, Los Angeles County, California. The intent of the project is to ensure the safety of the traveling public. The project location, public hearing location, and parking lot location are shown on the map pictured on page two.

The Draft IS/EA can be viewed at the following websites:

Caltrans Environmental Documents Webpage: <http://www.dot.ca.gov/d7/env-docs/>

Trancas Creek Project Webpage: <http://www.dot.ca.gov/d7/projects/trancas/>

Caltrans is currently soliciting written comments from elected officials, public agencies, private entities, and any interested/affected individuals who may want to comment on the environmental document for the project. Topics of concern regarding the proposed project may include potential biological, visual, hydrology, noise, hazardous waste, coastal, cultural, and Section 4(f) issues. Any opinions pertaining to these issues, and others, are welcome and will be carefully considered.

A public hearing will be held for the proposed project on Thursday, May 25, 2017 from 6 p.m. to 8 p.m. at:

Malibu West Beach Club
30756 Pacific Coast Hwy,
Malibu, CA 90265

Parking is available in a public lot on Trancas Canyon Road.

Caltrans strives to work cooperatively with all interested parties in an effort to exchange ideas

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

The Honorable Dianne Feinstein
May 4, 2017
Page 2

and to ensure that all factors are considered, and a mutually acceptable project is constructed. Caltrans is pleased to have your ongoing participation in this endeavor. Please submit any written comments no later than June 5, 2017 to:

Ronald Kosinski, Deputy District Director
California Department of Transportation
Division of Environmental Planning (Trancas Creek Bridge)
100 South Main Street MS-16A
Los Angeles, CA 90012

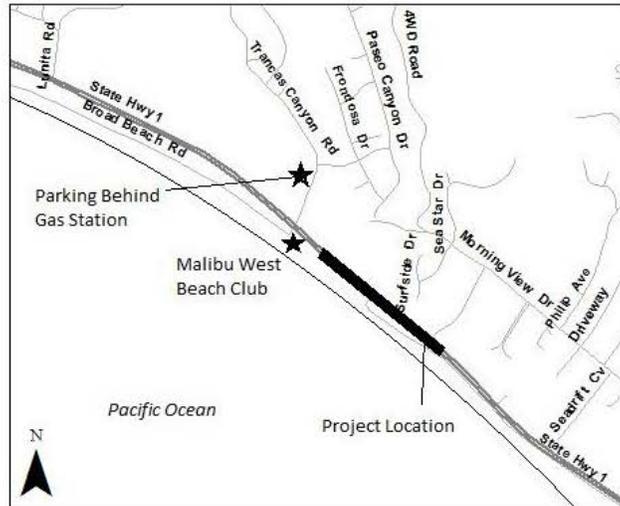
Thank you for your interest in this transportation improvement project.

Sincerely,



CARRIE L. BOWEN
District Director

LA-1/ Trancas Creek Bridge Replacement Project



"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, SUITE 100
LOS ANGELES, CA 90012
PHONE (213) 897-0362
FAX (213) 897-0360
TTY 711
www.dot.ca.gov



*Serious Drought.
Making Conservation
a California Way of Life.*

May 2nd, 2017

NOAA Fisheries
Office of Ecology and Conservation
1401 Constitution Avenue, Room 6800
Washington, DC 20230

File: LA-1, PM 56.5/56.9
Project #: 0712000094 (EA: 291400)
Trancas Cr. Bridge Replacement Project

Notice of Public Hearing and Availability of Initial Study/ Environmental Assessment

The California Department of Transportation (Caltrans) has completed studies and issued a draft Initial Study/Environmental Assessment (IS/EA) for the proposed Trancas Creek Bridge (Bridge No. 53-0027) Replacement Project located on State Route 1 (SR-1) in the City of Malibu, Los Angeles County, California. The intent of the project is to ensure the safety of the traveling public. The project location, public hearing location, and parking lot location are shown on the map pictured on page two.

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to enhance California's economy and livability"*

Mr./Ms./Honorable Name
Date
Page 2

and to ensure that all factors are considered, and a mutually acceptable project is constructed. Caltrans is pleased to have your ongoing participation in this endeavor. Please submit any written comments no later than June 5, 2017 to:

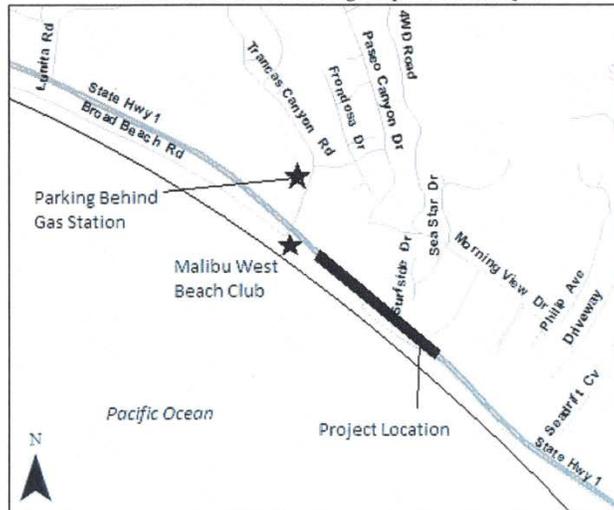
Ronald Kosinski, Deputy District Director
California Department of Transportation
Division of Environmental Planning (Trancas Creek Bridge)
100 South Main Street MS-16A
Los Angeles, CA 90012

Thank you for your interest in this transportation improvement project.

Sincerely,


Ronald Kosinski
Deputy District Director

LA-1/ Trancas Creek Bridge Replacement Project



"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

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Appendix J Responses to Comments

List of Coded Comment Letters

Code	Commenter Name	Date
Federal Agencies		
F-1	National Park Service	June 1, 2017
State Agencies		
S-1	Native American Heritage Commission	May 5, 2017
Local Agencies		
L-1	Laura Rosenthal	May 23, 2017
L-2	Skylar Peak	May 24, 2017
L-3	County of Los Angeles Fire Department	May 25, 2017
L-4	Resource Conservation District of the Santa Monica Mountains	May 24, 2017
L-5	Kristie Klose	May 30, 2017
L-6	City of Malibu	June 1, 2017
L-7	Mountains Recreation and Conservation Authority	May 30, 2017
Businesses and General Public		
G-1	David Jacobs	April 30, 2017
G-2	Hans Laetz	May 8, 2017
G-3	Brody	May 26, 2017
G-4	Jeff Lotman	May 26, 2017
G-5	Elizabeth Montgomery	May 30, 2017
G-6	Patt Healy	June 1, 2017
G-7	Jim Burns	June 1, 2017
G-8	Scott Hubbell	June 3, 2017
Public Hearing		
PH-1	Joanne Verbon Comment Card	May 25, 2017
PH-2	Rosemary Sampson #1 Comment Card	May 25, 2017
PH-3	Rosemary Sampson #2 Comment Card	May 25, 2017
PH-4	Jorge Rubalcava	May 25, 2017
PH-5	Marion Hastings	May 25, 2017
PH-6	Rosemary Sampson #3 Comment Card	May 25, 2017
PH-7	Jorge Rubalcava: Oral	May 25, 2017
PH-8	Greg Hannley: Oral	May 25, 2017
PH-9	Bill Sampson: Oral	May 25, 2017
PH-10	Stacy Clunies-Ross: Oral	May 25, 2017
PH-11	Jennifer Voccola-Brown: Oral	May 25, 2017
PH-12	Danny Klein: Oral	May 25, 2017
PH-13	Kay Collins: Oral #1	May 25, 2017
PH-14	Kay Collins: Oral #2	May 25, 2017
PH-15	Stephanie Hawner: Oral	May 25, 2017

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J.1 Federal Agencies (F Series)

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United States Department of the Interior

NATIONAL PARK SERVICE
 Santa Monica Mountains National Recreation Area
 401 West Hillcrest Drive
 Thousand Oaks, California 91360-4207

In reply refer to:
 L76/ 116-77 (por.), Trancas Bridge

June 1, 2017

Ron Kosinski, Deputy District Director
 Caltrans District 7
 100 S. Main St., Ste. 100
 Los Angeles, CA 90012

Re: Trancas Creek Bridge Replacement Project IS/EA

Dear Mr. Kosinski:

The National Park Service (NPS) has reviewed the proposed Trancas Creek Bridge Replacement Project, Initial Study/Environmental Assessment (IS/EA) No. 07-29140. California Department of Transportation (Caltrans) proposes to replace the bridge because the existing bridge has outlived its design life and has a history of scour-related issues that can no longer be addressed by routine maintenance. The project proposes three alternatives for review:

Alternative 1. No Build Alternative: No changes to the existing bridge structure;

Alternative 2. Short Bridge Replacement: This alternative would construct a new two-span bridge, 90.5 feet wide and 120 feet long, with the ability to lengthen the bridge in the future, if needed. The bridge would be elevated 2.5 feet to accommodate future 100-year flood events. Retaining walls would be used to support the elevated roadway without the need for sloped embankments that would require additional right-of-way; and

Alternative 3. Long Bridge Replacement: This alternative would construct a new four-span bridge, 90.5 feet wide and 240 feet, long without any elevation change. The design would accommodate a future 10-foot-wide, 8-foot-high, Americans with Disabilities (ADA)-compliant pathway under the bridge.

NPS appreciates the opportunity to participate in the public review process for the proposed project. We provide comments on the effects of private and public land development in the Santa Monica Mountains at the invitation of state and local units of government with authority to prevent or minimize adverse uses. The following comments are offered with respect to parkland management goals and objectives for the Santa Monica Mountains National Recreation Area (SMMNRA).

Proposed Project: Alternative 3—Long Bridge Replacement

NPS find that Alternative 3—Long Bridge Replacement would be the alternative most consistent with the goals of the SMMNRA General Management Plan to protect significant natural and cultural resources and highly sensitive areas, while providing compatible

recreation and educational opportunities to a diverse public. The 2003 SMMNRA General Management Plan specifically identifies the coastal reach of Trancas Creek as an area for protection and restoration of watershed and marine interface zones. The Long Bridge Replacement alternative (240 feet long) would support future efforts to restore Trancas Creek and former Trancas Lagoon. Alternative 3’s longer bridge would provide a wider opening and would facilitate better hydrologic flow under the bridge. Also, Under Alternative 3, there would be no additional bridge work needed in the future to accommodate lagoon restoration.

↑ F-1-1
| F-1-2
| F-1-3

Biological Resources

NPS finds the IS/EA’s Biological Environment setting description, impact analysis, and avoidance and mitigation measures satisfactory and appropriate. According to the IS/EA, measures will be taken to restore expected construction impacts for a small section of foredune habitat. Other measures will include steps to secure fencing and biological monitoring around Environmentally Sensitive Areas to protect the remaining foredune habitat and the western snowy plover (T&E species) during construction.

| F-1-4

T&E species

As the IS/EA notes in the Fish Passage topic in the Environmental Changes section (Pg. 2-160), the RCDSMM has been studying the feasibility of restoring Trancas Lagoon (*Trancas Lagoon Restoration Feasibility Study*, 2013-2015, RCDSMM, December 2015). The IS/EA notes the project would not impact steelhead trout owing to the absence of any recent steelhead observation records. NPS is partnering with the RCDSMM in the ongoing effort to plan, design, and implement a lagoon and creek restoration project, with one goal being to restore the presence of steelhead trout in Trancas Creek. California Trout, Inc., assessed stream habitat for steelhead in 2004 and determined that the overall habitat quality and hydrology in the Trancas watershed indicates the drainage system is “one of the watersheds where future restoration efforts should be focused.” (Section 3.4.12, *Santa Monica Mountains Steelhead Habitat Assessment Final Project Report*, California Trout, Inc., January 18, 2006).

| F-1-5

A long-term goal of lagoon restoration is to also restore the channelized sections of lower Trancas Creek to a condition that allows passage of steelhead upstream. While NPS concurs that the project would have no impacts on steelhead in the short-term, there would potentially be long-term positive impacts on steelhead trout with implementation of Alternative 3’s long bridge project. The longer bridge would facilitate a larger lagoon restoration area and would provide a better hydrologic interface where the restored stream channel would meet the restored lagoon area.

| F-1-6

Parks and Recreational Facilities

Section 2.1.4 identifies the project’s location adjacent to Zuma County Beach and Santa Monica Mountains National Recreation Area. Please note the following correction: Santa Monica Mountains National Recreation Area (SMMNRA) is a federal designation that covers the Santa Monica Mountains, including the coastline and all of the City of Malibu. The correct language for this section is that the project lies within SMMNRA, a unit of the

| F-1-7
↓

National Park System, and the project is adjacent to National Park Service-owned lands in Zuma/Trancas Canyons. NPS concurs with the IS/EA finding that the project would not have impacts on NPS-owned parks within SMMNRA that are adjacent to the project site.

↑
F-1-7

Alternative 3 has the potential to have long-term positive impacts on the SMMNRA recreational trail system. The IS/EA states that, under Alternative 3's longer bridge, the wider opening would allow for a 10-foot-wide, 8-foot high, Americans with Disabilities (ADA)-compliant pathway under the bridge. Alternative 3 would allow the development of a safe, public pathway under Pacific Coast Highway from Zuma Beach to the Trancas Country Market shopping center, and a connection to inland trails in Zuma/Trancas Canyons. A mountains-to-the-sea trail connection has been envisioned in several official trail plans including, but not limited to, the Malibu Local Coastal Program and Santa Monica Mountains Local Coastal Program. The trail is also illustrated as a proposed future trail in the NPS's SMMNRA Trail Inventory.

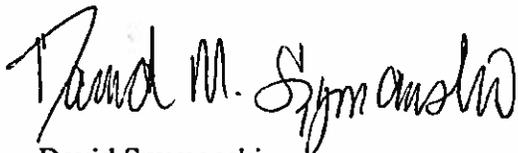
F-1-8

In conclusion, NPS finds the IS/EA provides an adequate range of alternatives, adequately discloses the potential environmental impacts for each alternative, and provides sufficient mitigation measures to minimize environmental impacts from bridge construction. Alternative 3 would facilitate NPS goals for natural resource protection and future recreational trail access at the Trancas bridge location.

F-1-9

Thank you for the opportunity to comment. If you have questions, please call Melanie Beck, Outdoor Recreation Planner, at (805) 370-2346.

Sincerely,



David Szymanski
Superintendent

cc: Joe Edmiston, Executive Director, Santa Monica Mountains Conservancy
Craig Sap, Acting Superintendent, Angeles District, State Department of Parks and Recreation
Clark Stevens, Executive Officer, Resource Conservation District of the Santa Monica Mountains

J.1.2 Response to Comments

Response to Comment F-1-1

Your comment has been noted.

Response to Comment F-1-2

The Long Bridge Alternative has been selected as the preferred alternative, in part, due to its better hydrologic characteristics and the potential long-term benefits to the creek and lagoon.

Response to Comment F-1-3

Your comment has been noted.

Response to Comment F-1-4

Your comment has been noted. Thank you for your review.

Response to Comment F-1-5

Your comment has been noted. The potential for the return of Steelhead trout to Trancas Creek depends heavily on the restoration of the lagoon and on restoration of the creek upstream of the lagoon.

Response to Comment F-1-6

This was one factor contributing to the selection of the Long Bridge Alternative as the preferred alternative.

Response to Comment F-1-7

Your comment has been noted. Appropriate changes have been made to the document to reflect the correct language of the Santa Monica Mountains National Recreation Area.

Response to Comment F-1-8

Caltrans strives to design projects that are consistent with local/regional Land Use Plans. Facilitating a pedestrian connection between the mountains and the sea is an important part of maintaining/enhancing mobility in all its forms.

Response to Comment F-1-9

Your comment has been noted.

J.2 State Agencies (S Series)

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NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
 1550 Harbor Blvd., Suite 100
 West Sacramento, CA 95691
 Phone (916) 373-3710
 Fax (916) 373-5471



May 5, 2017

S-1

Karl Price
 California Department of Transportation – District 7
 100 South Main Street MS-16A
 Los Angeles, CA 90012

Sent via e-mail: Christine_lan@dot.ca.gov

Re: SCH# 2017051008, Trancas Creek Bridge Replacement Project, City of Malibu; Los Angeles County, California

Dear Mr. Price:

The Native American Heritage Commission (NAHC) has reviewed the Initial Study/ Environmental Assessment prepared for the project referenced above. The review included the Introduction and Project Description, the Initial Study Environmental Checklist, and the Chapter 2, Affected Environment, Environmental Consequences, and Avoidance, Minimization, and Mitigation Measures section prepared by the California Department of Transportation. We have the following concerns:

S-1-1

- There is no documentation of **government-to-government consultation by the lead agency** under AB-52 with Native American tribes traditionally and culturally affiliated to the project area as required by statute, or that mitigation measures were developed in consultation with the tribes. Discussions under AB-52 may include the type of document prepared and proposed mitigation. Contact by consultants during the Cultural Resources Assessments is not formal consultation.
- Mitigation for inadvertent finds of Archaeological Resources, Cultural Resources, Tribal Cultural Resources, or Human Remains as discussed in Chapter 2 is missing or incomplete in other sections. Standard mitigation measures should be included in the environmental checklist of document.

S-1-2

S-1-3

The California Environmental Quality Act (CEQA)¹, specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.² If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared.³ In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

S-1-4

CEQA was amended in 2014 by Assembly Bill 52. (AB 52).⁴ **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** AB 52 created a separate category for "tribal cultural resources"⁵, that now includes "a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment."⁶ Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.⁷ Your project may also be subject to **Senate Bill 18 (SB 18)** (Burton, Chapter 905, Statutes of 2004), Government Code 65352.3, if it also involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. **Both SB 18 and AB 52 have tribal consultation requirements.** Additionally, if your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966⁸ may also apply.

S-1-5

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

S-1-6

Agencies should be aware that AB 52 does not preclude agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52. For that reason, we urge you

S-1-7

¹ Pub. Resources Code § 21000 et seq.

² Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b); CEQA Guidelines Section 15064.5 (b)

³ Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd.(a)(1); CEQA Guidelines § 15064 (a)(1)

⁴ Government Code 65352.3

⁵ Pub. Resources Code § 21074

⁶ Pub. Resources Code § 21084.2

⁷ Pub. Resources Code § 21084.3 (a)

⁸ 154 U.S.C. 300101, 36 C.F.R. § 800 et seq.

to continue to request Native American Tribal Consultation Lists and Sacred Lands File searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>. Additional information regarding AB 52 can be found online at http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf, entitled "Tribal Consultation Under AB 52: Requirements and Best Practices".

S-1-7

The NAHC recommends lead agencies consult with all California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.

S-1-8

A brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments is also attached.

Please contact me at gayle.totton@nahc.ca.gov or call (916) 373-3710 if you have any questions.

Sincerely,



Gayle Totton, B.S., M.A., Ph.D
Associate Governmental Project Analyst

Attachment

cc: State Clearinghouse

Pertinent Statutory Information:

Under AB 52:

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice.

A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.⁹ and **prior to the release of a negative declaration, mitigated negative declaration or environmental impact report.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18).¹⁰

The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- a. Alternatives to the project.
- b. Recommended mitigation measures.
- c. Significant effects.¹¹

1. The following topics are discretionary topics of consultation:

- a. Type of environmental review necessary.
- b. Significance of the tribal cultural resources.
- c. Significance of the project's impacts on tribal cultural resources.

If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency.¹²

With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process **shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10.** Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.¹³

If a project may have a significant impact on a tribal cultural resource, **the lead agency's environmental document shall discuss** both of the following:

- a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
- b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource.¹⁴

Consultation with a tribe shall be considered concluded when either of the following occurs:

- a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
- b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.¹⁵

Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 **shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program,** if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable.¹⁶

If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, **the lead agency shall consider feasible mitigation** pursuant to Public Resources Code section 21084.3 (b).¹⁷

An environmental impact report **may not be certified,** nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

- a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
- b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

⁹ Pub. Resources Code § 21080.3.1, subds. (d) and (e)

¹⁰ Pub. Resources Code § 21080.3.1 (b)

¹¹ Pub. Resources Code § 21080.3.2 (a)

¹² Pub. Resources Code § 21080.3.2 (a)

¹³ Pub. Resources Code § 21082.3 (c)(1)

¹⁴ Pub. Resources Code § 21082.3 (b)

¹⁵ Pub. Resources Code § 21080.3.2 (b)

¹⁶ Pub. Resources Code § 21082.3 (a)

¹⁷ Pub. Resources Code § 21082.3 (e)

- c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days.¹⁸
This process should be documented in the Tribal Cultural Resources section of your environmental document.

Under SB 18:

Government Code § 65352.3 (a) (1) requires consultation with Native Americans on general plan proposals for the purposes of “preserving or mitigating impacts to places, features, and objects described § 5097.9 and § 5091.993 of the Public Resources Code that are located within the city or county’s jurisdiction. Government Code § 65560 (a), (b), and (c) provides for consultation with Native American tribes on the open-space element of a county or city general plan for the purposes of protecting places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code.

- SB 18 applies to **local governments** and requires them to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. Local governments should consult the Governor’s Office of Planning and Research’s “Tribal Consultation Guidelines,” which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf
- **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a “Tribal Consultation List.” If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.**¹⁹
- There is no Statutory Time Limit on Tribal Consultation under the law.
- **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research,²⁰ the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city’s or county’s jurisdiction.²¹
- **Conclusion Tribal Consultation:** Consultation should be concluded at the point in which:
 - The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation.²²

NAHC Recommendations for Cultural Resources Assessments:

- Contact the NAHC for:
 - A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project’s APE.
 - A Native American Tribal Contact List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
 - The request form can be found at <http://nahc.ca.gov/resources/forms/>.
- Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - If part or the entire APE has been previously surveyed for cultural resources.
 - If any known cultural resources have been already been recorded on or adjacent to the APE.
 - If the probability is low, moderate, or high that cultural resources are located in the APE.
 - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

¹⁸ Pub. Resources Code § 21082.3 (d)

¹⁹ (Gov. Code § 65352.3 (a)(2)).

²⁰ pursuant to Gov. Code section 65040.2,

²¹ (Gov. Code § 65352.3 (b)).

²² (Tribal Consultation Guidelines, Governor’s Office of Planning and Research (2005) at p. 18).

Examples of Mitigation Measures That May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

- Avoidance and preservation of the resources in place, including, but not limited to:
 - Planning and construction to avoid the resources and protect the cultural and natural context.
 - Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
- Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - Protecting the cultural character and integrity of the resource.
 - Protecting the traditional use of the resource.
 - Protecting the confidentiality of the resource.
- Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed.²³
- Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated.²⁴

The lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

- Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources.²⁵ In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
- Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

²³ (Civ. Code § 815.3 (c)).

²⁴ (Pub. Resources Code § 5097.991).

²⁵ per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)).

Response to Comment S-1-1

Comment has been noted.

Response to Comment S-1-2

Government to government consultation information under AB-52 has been incorporated into the Section 2.6 Cultural Resources. Consultation with local tribes were initiated on July 26, 2012 and reinitiated after the passage of AB-52 on October 6, 2015. For the complete consultation information please refer to the Section 2.6.2.2.

Response to Comment S-1-3

Inadvertent finds of culturally related resources are incorporated throughout the document. Please see Section 2.6 Cultural Resources and the Environmental Commitments Record for the Cultural Resources standard mitigation measures.

Response to Comment S-1-4

Caltrans' cultural specialist has determined that this project will not adversely impact any historical or archeological resources. Therefore, an EIR will not be required for this project.

Response to Comment S-1-5

Government to government consultation information under AB-52 has been incorporated into the Section 2.6 Cultural Resources. Consultation with local tribes were initiated on July 26, 2012 and reinitiated after the passage of AB-52 on October 6, 2015. For the complete consultation information please refer to the Section 2.6.2.2.

SB 18 does not apply to this project.

Response to Comment S-1-6

Government to government consultation information under AB-52 has been incorporated into the Section 2.6 Cultural Resources. Consultation with local tribes were initiated on July 26, 2012 and reinitiated after the passage of AB-52 on October 6, 2015. For the complete consultation information please refer to the Section 2.6.2.2.

SB 18 does not apply to this project.

Response to Comment S-1-7

Government to government consultation information under AB-52 has been incorporated into the Section 2.6 Cultural Resources. Consultation with local tribes were initiated on July 26, 2012 and reinitiated after the passage of AB-52 on October 6, 2015. For the complete consultation information please refer to the Section 2.6.2.2.

Response to Comment S-1-8

Government to government consultation information under AB-52 has been incorporated into the Section 2.6 Cultural Resources. Consultation with local tribes were initiated on July 26, 2012 and reinitiated after the passage of AB-52 on October 6, 2015. For the complete consultation information please refer to the Section 2.6.2.2.

SB 18 does not apply to this project.

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J.3 Local Agencies (L Series)

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City of Malibu

L-1

23825 Stuart Ranch Road • Malibu, California • 90265-4861
Phone (310) 456-2489 • Fax (310) 456-3356 • www.malibucity.org

May 23, 2017

Ron Kosinski, Deputy District Director *RK*
California Department of Transportation
100 South Main Street, MS-16A
Los Angeles, CA 90012

RE: Trancas Creek Bridge Replacement Project

Dear Mr. Kosinski:

Thank you for the opportunity to comment on the Trancas Creek Bridge Replacement Project. I wish to submit these comments separately from the official comments you will receive from the City on the technical and environmental aspects of the project.

L-1-1

I strongly urge you to include the installation of a turn lane on Pacific Coast Highway at Trancas Canyon in this project to correct the oversight of not including the turn lane when the shopping center project was permitted. I would also request that a thorough study of the underpass be conducted and the effects on sea level rise be included in your plans.

L-1-2

As public servants, it is our duty to use the opportunities presented by one project to correct or improve other issues within the project area, and this is a perfect example of such an opportunity. I trust that Caltrans will consider all the environmental needs that can be addressed while completing the replacement of the Trancas Creek Bridge.

L-1-3

If you wish to discuss this further, please contact me at LRosenthal@malibucity.org. Thank you.

Sincerely,

Laura Rosenthal
Councilmember

cc: Mayor Peak and Honorable Members of the Malibu City Council
Reva Feldman, City Manager
Bob Brager, Public Works Director
Bonnie Blue, Planning Director
Carrie Bowen, Director, Caltrans District 7

Response to Comment L-1-1

Your comment has been noted.

Response to Comment L-1-2

The scope of the current project is to replace the deteriorating bridge over Trancas Creek. The addition of a right turn lane into the shopping center will need to be evaluated and, potentially, designed as a separate project. It would require acquisition of property from the shopping center.

Response to Comment L-1-3

Your comment has been noted.



City of Malibu

L-2

Skylar Peak, Mayor

23825 Stuart Ranch Road · Malibu, California · 90265-4861
Phone (310) 456-2489 · Fax (310) 456-3356 · www.malibucity.org

May 24, 2017

Ron Kosinski, Deputy District Director *PK*
California Department of Transportation
100 South Main Street, MS-16A
Los Angeles, CA 90012

RE: Trancas Creek Bridge Replacement Project

Dear Mr. Kosinski:

Thank you for the opportunity to comment on the Trancas Creek Bridge Replacement Project. The City of Malibu will be submitting its official comments on the technical and environmental aspects of the project, but I wish to submit this separate request that nothing related to the Trancas Creek Bridge Replacement Project take place without the addition of an extended right hand turn lane at Pacific Coast Highway and Trancas Canyon Road.

L-2-1

The problems related to smooth traffic flow and, more importantly, the safety of motorists, cyclists and pedestrians at that intersection, have been ongoing since the shopping center project was permitted. It is imperative that Caltrans use this opportunity to remedy that situation by incorporating into the bridge replacement plans the creation of a clear turning lane to provide safe ingress and egress for all vehicles turning into the shopping center or onto Trancas Canyon Road.

L-2-2

I would also urge you to include safe pedestrian passage to the beach under the new bridge and evaluate the effects of the project on sea level rise to ensure protection of the natural environment.

L-2-3

If you wish to discuss this further, please contact me at SPeak@malibucity.org. Thank you.

Sincerely,

Skylar M. Peak

Skylar Peak
Mayor

cc: Honorable Members of the Malibu City Council
Reva Feldman, City Manager
Bob Brager, Public Works Director
Bonnie Blue, Planning Director
Carrie Bowen, Director, Caltrans District 7

Response to Comment L-2-1

The scope of the current project is to replace the deteriorating bridge over Trancas Creek. The addition of a right turn lane into the shopping center will need to be evaluated and, potentially, designed as a separate project. It would require acquisition of property from the shopping center.

Response to Comment L-2-2

See response to comment L-2-1.

Response to Comment L-2-3

Alternative 3 will provide additional room to allow for a pedestrian undercrossing to the beach. The bridge will also be widened by as much as 9 feet to improve safety for pedestrians and bicyclists.

Sea level rise was one of the parameters that Caltrans analyzed during the preliminary design of this project. The new bridge will be designed and built to accommodate the latest sea level rise projections.



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

L-3

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

May 25, 2017

Ron Kosinski, Deputy District Director *RK*
California Department of Transportation
Division of Environmental Planning
100 South Main Street
Los Angeles, CA 90012

Dear Mr. Kosinski:

NOTICE OF AVAILABILITY OF DRAFT INITIAL STUDY/ENVIRONMENTAL ASSESSMENT, "TRANCAS CREEK BRIDGE REPLACEMENT PROJECT," PROPOSES TO IMPROVE THE SAFETY OF THE ROADWAY PRISM BY REPLACING THE TRANCAS CREEK BRIDGE, IT WILL REQUIRE NEW PERMANENT AND TEMPORARY RIGHT-OF-WAY, MALIBU, FFER 201700056

The Notice of Availability of Draft Initial Study/Environmental Assessment has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department.

The following are their comments:

PLANNING DIVISION:

The first paragraph in Section 2.3.2.3, Fire Protection Services should be corrected to state, "Combined, these stations have four staff engine companies, two paramedic rescue squads, one battalion chief, and a swift water rescue team that is staff during inclement weather."

L-3-1

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF:

- | | | | | | | | |
|--------------|-----------|------------------|----------------------|-----------|----------------------|-----------------------|------------------|
| AGOURA HILLS | BRADBURY | CUDAHY | HAWTHORNE | LA HABRA | LYNWOOD | PICO RIVERA | SIGNAL HILL |
| ARTESIA | CALABASAS | DIAMOND BAR | HIDDEN HILLS | LA MIRADA | MALIBU | POMONA | SOUTH EL MONTE |
| AZUSA | CARSON | DUARTE | HUNTINGTON PARK | LA PUENTE | MAYWOOD | RANCHO PALOS VERDES | SOUTH GATE |
| BALDWIN PARK | CERRITOS | EL MONTE | INDUSTRY | LAKEWOOD | NORWALK | ROLLING HILLS | TEMPLE CITY |
| BELL | CLAREMONT | GARDENA | INGLEWOOD | LANCASTER | PALMDALE | ROLLING HILLS ESTATES | WALNUT |
| BELL GARDENS | COMMERCE | GLEN DORA | IRWINDALE | LAWNDALE | PALOS VERDES ESTATES | ROSEMead | WEST HOLLYWOOD |
| BELLFLOWER | COVINA | HAWAIIAN GARDENS | LA CANADA-FLINTRIDGE | LOMITA | PARAMOUNT | SAN DIMAS | WESTLAKE VILLAGE |
| | | | | | | SANTA CLARITA | WHITTIER |

Ron Kosinski, Deputy District Director
May 25, 2017
Page 2

LAND DEVELOPMENT UNIT:

- 1. All proposals for traffic calming measures (speed humps/bumps/cushions, traffic circles, roundabouts, etc.) shall be submitted to the Fire Department for review prior to implementation. | L-3-2
- 2. Provide three sets of alternate route (detour) plans with a tentative schedule of planned closures prior to the beginning of construction. Complete architectural/ structural plans are not necessary. | L-3-3
- 3. Temporary bridges shall be designed, constructed, and maintained to support a live load of at least 70,000 pounds. A minimum vertical clearance of 13'6" will be required throughout construction. | L-3-4
- 4. Disruptions to water service shall be coordinated with the County of Los Angeles Fire Department and alternate water sources shall be provided for fire protection during such disruptions. | L-3-5

The County of Los Angeles Fire Department's Land Development Unit appreciates the opportunity to comment on this project.

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

The statutory responsibilities of the County of Los Angeles Fire Department's Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. Potential impacts in these areas should be addressed. | L-3-6

The County of Los Angeles Fire Department's Forestry Division has no further comments regarding this project.

HEALTH HAZARDOUS MATERIALS DIVISION:

The Health Hazardous Materials Division of the Los Angeles County Fire Department has no comments or requirements for the project at this time.

If you have any additional questions, please contact this office at (323) 890-4330.

Ron Kosinski, Deputy District Director
May 25, 2017
Page 3

Very truly yours,



MICHAEL Y. TAKESHITA, ACTING CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

MYT:ac

Response to Comment L-3-1

The corrections have been made.

Response to Comment L-3-2

Design plans will be submitted for review during the final design phase of the project.

Response to Comment L-3-3

Detour plans will be submitted for review during the final design phase of the project.

Response to Comment L-3-4

Temporary bridges are not proposed as part of this project.

Response to Comment L-3-5

Water service disruption is not expected for this project. Caltrans will coordinate with the County of Los Angeles Fire Department if any disruption to water service is necessary.

Response to Comment L-3-6

Potential impacts to these resources are discussed in Chapter 2 of MND/FONSI.

BOARD OF DIRECTORS

Richard C. Brody
President

Steven Rosentsweig
Vice President

Nancy Helsley
Treasurer

Beth Burnam
Director

Mary Ellen Strote
Director

26 May 2017

Delivered by email

Ron Kosinski, Deputy District Director *PK*
Caltrans District 7
Division of Environmental Planning
100 S. Main Street MS-16A
Los Angeles, CA 90012

Re: Trancas Creek Bridge Replacement Project IS/EA

EXECUTIVE OFFICER
Clark Stevens

Dear Mr, Kosinski,

The Resource Conservation District of the Santa Monica Mountains (RCDSMM) appreciates the opportunity to provide comments on the Trancas Bridge Replacement Project IS/EA. The RCDSMM has been working closely with Caltrans staff during the development of the design alternatives as an outgrowth of the Trancas Creek and Lagoon Feasibility Study completed by the RCDSMM in 2015. The purpose of that study was to examine potential lagoon restoration with the goals to increase breaching to the ocean to facilitate passage of endangered southern steelhead trout, wetland and transitional habitat, as well as passive recreation opportunities for the community. As part of the extensive and inclusive Technical Advisory Committee for that effort, Caltrans had the opportunity to coordinate the bridge replacement review with numerous permitting agencies, all of whom support the restoration of Trancas Lagoon. Both CDFW and NMFS recommended that every effort be made to develop a bridge design that was self-mitigating and accommodating to lagoon restoration. There was also significant public support for this idea.

L-4-1

L-4-2

The RCDSMM therefore supports Alternative 3: Long Bridge Replacement (240' span) for a variety of reasons. This alternative provides the most opportunity to accomplish not only the goal of Caltrans to replace a bridge that will last many years, but also allows for the best range of lagoon restoration designs (including those addressing sea level rise) and for a safe, public, and potentially ADA-accessible trail connection under PCH from Zuma Beach to the Trancas Market development and to the entire upstream National Park Service trail network. Additionally, Alternative 3 Long Bridge avoids many of the problems associated with scour issues on the west abutment by providing adequate space to possibly redirect the thalweg further east, with pooling under the shade of the bridge span. Both of these benefits would be considered important mitigation by CDFW and NMFS, in addition to having benefits related to the lifespan and functionality of the bridge itself.

L-4-3

L-4-4

Alternative 2 Short Bridge will present numerous challenges associated with the need to elevate the road bed by 2.5 feet above current height over the creek with the associated ramping extending both north and southbound on PCH, as well as install retaining walls to protect the west bank. It does not appear that the cost of the acquisition/relocation of the private property located at 30708 PCH is incorporated into the estimated cost of that alternative in the document and could substantially increase the cost of that alternative.

L-4-5

Also, Alternative 2 Short Bridge span (120') is functionally almost the same as the existing bridge (84"span) from a hydrologic, mitigation or restoration perspective. The habitat and hydraulic problems of the existing conditions would continue as the shorter span maintains the existing pinch point, which leads to scour problems. This also contributes to the current sediment deposition in the existing lagoon and diminished habitat value over time. Although the design acknowledges the potential to increase the span length at some time in the future, given the real world constraints to making that happen, realistically this alternative would preclude effective redirection of the thalweg further east—a critical requirement if a broader, more functional, and resilient estuarial system is to be recovered at Trancas Creek and Lagoon.

L-4-6

L-4-7

While we understand that economic considerations are a huge driver for selecting a preferred alternative, it appears that the proposed cost difference between Alternative 2 short bridge and Alternative 3 Long Bridge could potentially be addressed with the values of on-site mitigation and by finding additional grant funds that could help fill the gap between what has been allocated internally for the bridge and the additional cost of the longer span alternative.

L-4-8

Alternative 3 Long Bridge provides a unique opportunity to accomplish a safe, long-term bridge replacement AND a lagoon restoration that would support the recovery of a critically endangered fish species on the brink of extinction, provide additional safe public access across PCH under the road, and allow for an integrated bridge replacement and habitat restoration landscape. Alternative 3 Long Bridge is the best choice if we are to gain critical habitat acreage and functionality and help to reverse the decline of southern California's federally-endangered Southern Steelhead Trout.

L-4-9

We thank you for the opportunity to provide our comments and look forward to continuing to work with Caltrans, and all agency and public stakeholders to restore Trancas Lagoon and creek.

Respectfully submitted,



Clark Stevens
Executive Officer

CC: Assemblymember Richard Bloom
State Senator Henry Stern
Los Angeles County Supervisor Sheila Kuehl
State Senator (ret.) Fran Pavley
SMMNRA Superintendent David Szymanski
SMMC Executive Officer Joseph Edmiston, FAICP

Response to Comment L-4-1

Caltrans appreciates your assistance in developing a project that satisfies the requirements of both agencies.

Response to Comment L-4-2

The "self-mitigating" concept has been incorporated into the development of the Long Bridge Alternative. However, it is predicated on the Trancas Lagoon restoration moving forward.

Response to Comment L-4-3

Your comment is noted.

Response to Comment L-4-4

As you state, moving the thalweg/low-flow channel away from the west abutment will provide the dual benefits of reducing potential scour and increasing habitat value. It is a win-win situation.

Response to Comment L-4-5

The cost of right of way acquisition/relocation has been included in the MND/FONSI.

Response to Comment L-4-6

The Short Bridge Alternative would have been constructed in a way that would allow it to be lengthened should the lagoon restoration move forward, thus reducing impacts to the "future" lagoon. However, the Long Bridge Alternative has been selected as the preferred alternative.

Response to Comment L-4-7

Alternative 2 has not been selected as the preferred alternative. Therefore, this is no longer an issue.

Response to Comment L-4-8

Caltrans considers a wide range of factors during the selection of the preferred alternative, with cost being just one of many. The Long Bridge Alternative was selected as the preferred alternative based on an analysis of the overall benefits and impacts associated with each alternative.

Response to Comment L-4-9

Comment noted. These were just some of the factors that went into the selection of the Long Bridge Alternative as the preferred alternative.

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Guest 1

From: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Sent: Thursday, June 01, 2017 9:26 AM
To: Cayla McDonell; Patrick Kallas
Subject: FW: Trancas Creek Bridge Replacement Project Comment

Follow Up Flag: Follow up
Flag Status: Flagged

From: Klose, Kristie A -FS [<mailto:kristieaklose@fs.fed.us>]
Sent: Tuesday, May 30, 2017 10:26 AM
To: Kosinski, Ron J@DOT <ron.kosinski@dot.ca.gov>
Subject: Trancas Creek Bridge Replacement Project

Dear Mr. Kosinski,

When pivotal moments present themselves for prescriptive actions that can tip the balance of whether endangered and threatened species are on the path to recovery or extirpation, the choice of action becomes obvious. The Trancas Creek Bridge Replacement Project -- *Draft Initial Study/Environmental Assessment (IS/EA) and Section 4(f) Evaluation for State Route 1 (Pacific Coast Highway), City of Malibu, Los Angeles County, California (EA: 07-29140/EFIS #: 0712000094)* presents such an opportunity. This project outlines three alternatives for consideration including 1) no build alternative (i.e., no changes to the existing bridge structure), 2) short bridge replacement that is 20’ longer than the existing bridge, elevated 2.5’ above current grade, and requires retaining walls and ramping along both north and southbound PCH to meet flood control standards, and 3) four-span bridge replacement that is 140’ longer than the existing bridge, and would allow for an Americans with Disabilities compliant path under the bridge.

California has lost more than 90% of its wetlands including but not limited to, estuaries, salt marshes, river floodplains and alluvial terraces due to anthropogenic land use changes including agriculture, dams, diversions, stream channelization, levees, dredging, construction, and paved surfaces. Only **Alternative 3**, would restore and protect the Trancas Lagoon and facilitate the return of Endangered Species Act (ESA) listed species including federally endangered Southern California steelhead (*Oncorhynchus mykiss*), endangered arroyo toad (*Bufo californicus*), threatened California red-legged frog (*Rana draytonii*), species of concern Pacific lamprey (*Entosphenus tridentata*) and critical habitat. **Alternative 3**, because of its longer expanse, will improve habitat, protect biota, and support the hydraulic capacity of floodwaters and sea level rise due to climate change. By comparison, to Alternatives 1 and 2, only **Alternative 3**, with its greater floodplain expanse can buffer increased hydraulic energy, reduce flood-risk potential, ameliorate the effects of sediment and debris flows, and reduce subsequent damage to road infrastructure and adjacent properties.

L-5-1

L-5-2

As extreme weather events become a more common occurrence, adequately sized road-stream crossing infrastructure represents a sound investment for the future. The current bridge system (84’ expanse), on the other hand, is more susceptible to catastrophic failure during flood events which can result in significant economic (community and tourism) costs. Only **Alternative 3** provides a suitable design supporting the return of a complex of coastal wetlands, fosters all life history stages of anadromy with improved aquatic organism passage, and provides flood resilience in a changing climate.

L-5-3

Please consider the above rationale in support of **Alternative 3** for the Trancas Creek Bridge Replacement Project. Thank you for your time and consideration of this matter.

Sincerely,

Kristie Klose



Kristie Klose, PhD
Fisheries Biologist

Forest Service
Los Padres National Forest

p: 805-961-5745

f: 805-961-5729

kristieaklose@fs.fed.us

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Caring for the land and serving people

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Response to Comment L-5-1

Comment noted.

Response to Comment L-5-2

Your comment has been noted. Alternative 3 would enhance the natural environment while providing adequate channel capacity.

Response to Comment L-5-3

See response to comment L-5-2.

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City of Malibu

23825 Stuart Ranch Road ♦ Malibu, California ♦ 90265-4861
Phone (310) 456-2489 ♦ Fax (310) 317-0950 ♦ www.malibucity.org

June 1, 2017

Mr. Ron Kosinski
Deputy District Director
California Department of Transportation
Division of Environmental Planning
100 S. Main Street, MS 16-A
Los Angeles, CA 90012

**SUBJECT: DRAFT INITIAL STUDY/ENVIRONMENTAL ASSESMENT (IS/EA) FOR THE TRANCAS CREEK
BRIDGE REPLACEMENT PROJECT
REVIEW COMMENTS**

Dear Mr. Kosinski,

Thank you for providing the City of Malibu the opportunity to submit comments regarding the Draft Initial Study/Environmental Assessment (IS/EA) for the Trancas Creek Bridge Replacement Project. The City's comments are attached.

In general, the City's comments focus on flood risk and pedestrian, sidewalk, parking, transit, and bike lane improvements. However, as you are aware, the City is particularly concerned with pedestrians dangerously crossing Pacific Coast Highway (PCH) in this area. Since Caltrans is aware of this condition, designing the new bridge with a pedestrian undercrossing leading to Zuma Beach would easily eliminate this existing unsafe condition. This simple design would include a sidewalk on the land side of PCH extending from the intersection of Trancas Canyon Road to a pedestrian undercrossing at the new bridge. The undercrossing would connect to a sidewalk on the ocean side of PCH where it would safely lead visitors towards Zuma Beach. This design would be similar to the existing pedestrian undercrossing that Caltrans installed at Topanga Beach. Including a pedestrian undercrossing with this project would be simple and greatly improve pedestrian safety in this heavily congested area of PCH. However, not including a pedestrian undercrossing would clearly neglect the safety of the millions of people that annually visit Malibu and Zuma Beach.

L-6-1

L-6-2

In addition, the installation of a northbound right-turn lane at the intersection of Trancas Canyon Road and PCH extending from the proposed new bridge is severely needed for this project. As you may be aware, the average speed of vehicles traveling northbound is between 50-60 mph and any sudden deceleration for vehicles turning right on Trancas Canyon Road is a contributing factor to

L-6-3

rear-end collisions at this intersection. Please also note that in accordance with the California's "Complete Streets Policy" that was effective in 2008, as a matter of law, Caltrans is required to accommodate all modes of travel in their designs which includes parking, sidewalks, bike lanes, transit, and right turn lanes. Although Caltrans neglected to include this much needed northbound right turn lane during the previous development of the Trancas Country Mart project, it is imperative that Caltrans does not let this happen again.

L-6-4

Lastly, the City was very surprised, but equally disappointed, to hear from residents attending the May 25, 2017 public hearing that they were not given proper notice by Caltrans that their property may be acquired for the right-of-way. Please note that all the work to improve the bridge should be performed within the existing Caltrans right-of-way and that the City strictly opposes and will not support any property acquired by eminent domain.

L-6-5

L-6-6

In closing, the City appreciates the opportunity to comment on the Draft IS/EA before it is finalized and looks forward to receiving your responses to the City's concerns.

If you have any questions or require further clarification, please contact me at (310) 456-2489 ext. 247 or bbrager@malibucity.org.

Sincerely,

Robert L. Brager, PE, JD

Public Works Director/City Engineer/Floodplain Administrator

Enclosure

cc:

Reva Feldman, City Manager
 Bonnie Blue, Planning Director
 Stephanie Hawner, Senior Planner
 Rob Duboux, Assistant Public Works Director
 Jorge Rubalcava, Assistant Civil Engineer

Trancas Creek Bridge Replacement Project IS/EA (Public Works Comments)

1. **Section S.2 Page S-1** is misleading. It appears that Caltrans will install a Class II bike lane based on the following: "The project will also promote multimodal transportation through the incorporation of a Class II bike lane". However, a bike lane on the ocean side of PCH already exists which was installed by the City of Malibu 2015 as stated in the report in **Chapter 1 Section 1.2 Page 1-7**. Please revise this statement. L-6-7

2. **Section S.3 Page S-2:** Alternative 3 proposes a longer bridge which appears to accommodate the desires of the Natural Conservancy Organization or the Trancas Lagoon Restoration Project, as stated in **Chapter 1 Section 1.3.1.3 Page 1-9**. Transportation funds shall not be used on non-transportation projects. This violates the concept of "color of money". The Trancas Lagoon Restoration should be a separate project in its entirety as stated in **Chapter 2 Section 4(f)/CFR, Title 23, Part 774, Page 2-21**. Please make it clear in this document that Caltrans will not use transportation funds to support non-transportation related portions of this project. L-6-8

3. **Chapter 1 Section 1.3 Page 1-8** states that the center median will be reduced to a 6.5' width. In an effort to reduce the amount of right-of-way being acquired from private properties, shouldn't Caltrans first investigate utilizing more of the center median space? L-6-9

4. **Chapter 1 Section 1.3 Page 1-8** proposes 11' wide standard lanes. This information is incorrect. Standard width lanes are 12', not 11'. Caltrans has required the City in previous transportation projects on PCH to use standard 12' lanes. Installing 11' lanes will make a portion of the highway non-standard. Please clarify and be consistent. L-6-10

5. **Chapter 1 Section 1.3 Page 1-8:** It appears that Caltrans will accommodate and install a 6' wide bike lane. However, a bike lane on the southbound side of PCH already exists which was installed by the City of Malibu in 2015 as stated in the report in **Chapter 1 Section 1.2 Page 1-7**. Please revise. Also, see item 1 above. L-6-11

6. **Chapter 1 Section 1.3 Page 1-8:** Please clearly show and specifically state which properties Caltrans proposes to acquire in this project. **Figure 2.7 of Chapter 2 Section 2.2.2.4 Page 2-31** does not depict this intent. The City strictly opposes and will not support any property acquired by eminent domain. L-6-12

7. **Chapter 1 Section 1.3.1.2 Page 1-8:** According to this section of the report, the design storm event for the bridge accommodates the 50-year storm event. However, **Chapter 2 Table 2.7 and Section 2.7.3.2**, uses the 100-year storm event. This is contradicting information. Also, the hydrologic and hydraulic calculations shall be in conformance with FEMA's new Base Flood Elevation and FEMA's Preliminary Maps which are currently under revision. As such, the correct design storm event used shall be for a 100-year storm event not a 50-year storm event. Please clarify. L-6-13



- 8. **Chapter 2 Section 2.1.2.2 Page 2-14:** Since this project will require road closures, please clearly specify the detour routes and times. | L-6-14

- 9. **Chapter 2 Section 2.2.2.2 Page 2-31:** Please replace the word “Gurney” with the correct street name “Guernsey”. | L-6-15

- 10. **Chapter 2 Section 2.2.2.2 Page 2-31:** The referenced commercial property with businesses is located northwest of the bridge, not northeast. Please revise. | L-6-16

- 11. **Chapter 2 Section 2.2.2.3 Page 2-31 Alternatives 2 and 3** are confusing. Please clearly specify which vacant lot is being addressed or considered. Is the report referring to the land side of the bridge or the ocean side of the bridge? Per the May 25, 2017 meeting at Malibu West Beach Club, it is unclear how the properties identified in the report will be affected. Please clarify. | L-6-17

- 12. **Chapter 2 Section 2.2.2.4 Page 2-31 and Figure 2-7** depicts the partial acquisition of real property. During the May 25, 2017 meeting at Malibu West Beach Club, attending homeowners seemed to be unaware of Caltrans’ proposed plans to acquire portions of their property. Have all affected property owners been properly notified? Please note that the City strictly opposes and will not support any property acquired by eminent domain. | L-6-18

- 13. **Chapter 2 Section 2.4.2.2 Table 2.6 Page 2-50:** It is not clear of the actual location of these accidents on PCH. Also, how many accidents occurred at the intersection of PCH and Trancas Canyon Road? Please clarify. | L-6-19

- 14. **Chapter 2 Section 2.4.4 TT-2** states that two open lanes will be maintained to the traveling public during peak hours. What happens during non-peak hours? Will the two open lanes remain open? Please clarify. | L-6-20

- 15. **Chapter 2 Table 2.7 Page 2-63** depicts a table with summarized calculations for the 100-year storm event. **Chapter 1 Section 1.3.1.2 Page 1-8** describes how the 50-year storm event will be accommodated. This is contradicting information. Please revise. | L-6-21

- 16. **Chapter 2 Table 2.7 Page 2-69** shows a vertical clearance of 1.9-ft. Please provide a standard minimum 2-ft of vertical clearance/freeboard. | L-6-22

- 17. **Chapter 2 Section 2.7.3.2 Page 2-69:** Provide a copy of the Final Hydraulic Report. | L-6-23

- 18. **Chapter 2 Section 2.7.3.2 Page 2-70** states that most of the project area is in Zone X. Although this may be true, please note the actual bridge structure is entirely in the AE zone. Please clarify. | L-6-24

- 19. **Chapter 2 Table 2.78 Page 2-71** shows a vertical clearance of 0.4-ft. Please provide a standard minimum 2-ft vertical clearance/freeboard. | L-6-25

- 20. **General Comment:** Provide a bike lane on the land side of PCH. | L-6-26

- 21. **General Comment:** Provide enough width for parking and transit on both sides of PCH. | L-6-27
- 22. **General Comment:** Provide a sidewalk for pedestrians on the land side of PCH from Trancas Canyon Road to the proposed new bridge that would contain a pedestrian undercrossing. The pedestrian undercrossing would then be connected to a sidewalk on the south side of PCH that leads to Zuma Beach; similar to the undercrossing located at Topanga Canyon Road and PCH. | L-6-28
- 23. **General Comment:** The proposed bridge wing walls shall have enough riprap protection on both the northwest and northeast sides to ensure the structural integrity of the bridge. | L-6-29
- 24. **General Comment:** Please ensure that a northbound right-turn lane at the intersection of Trancas Canyon Road and PCH is included in this project. The average speed of vehicles traveling northbound is between 50-60 mph and sudden deceleration for northbound vehicles turning right on Trancas Canyon Road have been a contributing factor in rear-end collisions at that intersection. | L-6-30
- 25. **General Comment:** Will the location of any existing septic systems be affected by the acquisition of property? Please investigate and confirm. | L-6-31

**Trancas Creek Bridge Replacement Project IS/EA
(Planning Department Comments)**

- 1. Figures 2-6 and 2-7 illustrate permanent and temporary acquisition areas. Any private property southwest of the project site shall be identified and information should be provided as to whether a partial or entire take of those properties is proposed based upon the short bridge and long bridge alternatives. | L-6-32
- 2. Table S.1 Summary of Potential Project Impacts. The statements concerning –
 - o Community Character and Cohesion should be modified to reflect that the build alternative WILL encroach on or affect.... Remove the word ~~No~~ preceding Adverse. Statement should read ADVERSE impacts to community character and cohesion are expected.
 - o Relocations and Real Property Acquisitions should include in the mitigation measures the address and APN of the affected parcels. | L-6-33
 - o Visual should be modified to reflect in VIS-2 that the City of Malibu, not the California Coastal Commission, is the approving body for the proposed scope of work and that the bridge railing design must be approved by the City through the CDP process.
 - o Natural Communities should be modified to reflect that the City of Malibu, not the California Coastal Commission, is the approving body for the proposed scope of work.
- 3. Section 2.5.3.2 should be modified to reflect that the City of Malibu, not the California Coastal Commission, is the approving body for the proposed scope of work. City of Malibu retains jurisdiction of the processing and issuance of the Coastal Development Permit for the proposed project. | L-6-34

- 4. Individual notices specific to those property owners whose property may be acquired for the right of way, either permanently or temporarily, should be notified and allowed time to comment prior to adoption of the final CEQA/NEPA document. | L-6-35

- 5. The City conceptually supports a bridge design that accommodates a pedestrian undercrossing and lagoon restoration. Without a more detailed design that demonstrates all impacts, including the extent of acquisition of private property for right of way improvements, the City cannot fully evaluate the project or provide complete comments at this time. | L-6-36

- 6. Page 2-16, Paragraph 2, under the Local Coastal Program section, should be revised to reflect that City has a complete General Plan and a Certified LCP, including an LUP and LIP. The City's zoning ordinance is also complete. See Section 2.13.1.2 of IS/EA. | L-6-37

- 7. Table 2.3
 - a. Should be modified to reflect that the Chapters being referenced are from the Malibu Local Implementation Plan, which provides the development standards and regulations that implement the policies of the Malibu Land Use Plan. Policy Chapters are the in the Malibu Land Use Plan. | L-6-38
 - b. The discussion regarding LIP Chapter 4 (ESHA) references DSRA. The Malibu LIP does not include a disturbed sensitive resource status. The determination regarding the extent of ESHA will be made by the City Biologist as part of the CDP process, and the project will be conditioned as required by the Malibu LCP.

- 8. Section 2.2.2.2.
 - a. Affected environment states that all build alternatives will require a partial take of an adjacent real property. Identify the address and APN of affected parcels.
 - b. Include that there are private homes southwest of the project at the mouth of the creek on the ocean side of the bridge. The commercial properties are northwest of the project site. | L-6-39
 - c. Under Alternatives 2 and 3, correct text to reflect APN 4469-045-001 is northwest of the bridge. Identify 30708 PCH and any other private property southwest of the bridge that will be affected and the extent of the impact.

- 9. Overall, document is internally inconsistent in how it references direction, which is confusing to the reader. Recommended terms such as upcoast/downcoast and inland/seaward would clarify. | L-6-40

- 10. Section 2.5.2 should be revised to reflect that Malibu LUP Chapter 6, Section 6.3 provides that PCH is a designated scenic road, and Section 6.4 provides that places on, along, within, or visible from scenic roads, trails, beaches, parklands and state waters that offer scenic vistas of the beach and ocean, coastline, mountains, canyons and other unique natural features are considered Scenic Areas and subject to development standards. | L-6-41

- 11. Section 2.19.13 Item CI-13 should be modified to reflect the allowed hours for construction as provided for in Malibu Municipal Code Section 8.24.050(G) – Construction: operating or causing the operation of any tools, equipment, impact devices, derricks or hoists used in construction, chilling, repair, alteration, demolition or earthwork, on weekdays between the hours of seven p.m. and seven a.m., before eight a.m. or after five p.m. on Saturday, or at any time on Sundays or holidays, except as provided in Section 8.24.060(D). | L-6-42

12. Sea Level Rise must be addressed and evaluated by a Coastal Engineer.

- a. Malibu LIP Chapter 10, Section 10.4(A) and Malibu LUP Policy No. 4.22 require that the siting and design of new shoreline development and shoreline protective devices take into account anticipated future changes in sea level. In particular, an acceleration of the historic rate of sea level rise shall be considered and its potential impact on beach erosion, shoreline retreat, and bluff erosion rates shall be evaluated.
- b. Malibu LUP Chapter 4, Policy No. 4.16 provides that 4.16 All applications for new development on a beach, beachfront or blufftop property shall include a wave uprush and impact report and analysis prepared by a licensed civil engineer with expertise in coastal engineering which addresses and demonstrates the effects of said development in relation to the following: The profile of the beach; Surveyed locations of mean high tide lines acceptable to the State Lands Commission; The area of the project site subject to design wave uprush; Foundation design requirements; The need for a shoreline protection structure over the life of the project; The long term effects of proposed development on sand supply; and Future projections in sea level rise.

L-6-43



Response to Comment L-6-1

With the selected Preferred Alternative, the new bridge structure will be able to accommodate for a pedestrian undercrossing during dry seasons.

Response to Comment L-6-2

With the selected Preferred Alternative, the new bridge structure will be able to accommodate for a pedestrian undercrossing during dry seasons.

Response to Comment L-6-3

The right turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

Response to Comment L-6-4

Parking on the shoulder will be retained for the new design. However, additional right of way will be needed from the private properties in order to accommodate for pedestrian sidewalks. With the selected Preferred Alternative, the new bridge structure will be able to accommodate for a pedestrian undercrossing during dry seasons.

The right turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

Response to Comment L-6-5

The Department of Transportation has protocol for how to handle instances like this as they arise. The homeowners were given notice as soon as the right of way impact were discovered and given ample instructions and opportunity to review the project, attend the public hearing, and submit comments to Caltrans.

Response to Comment L-6-6

The selected Preferred Alternative does not require the acquisition of the residential home to the northwest of the bridge. Some additional right of way is required for this project to include elements that the City of Malibu would like to have included, such as parking, bike lanes, and shoulders for the roadway.

Response to Comment L-6-7

There is an existing Class II bike lane on the southbound side of PCH. The project will widen the bridge and adjacent roadway by as much as 9 feet to accommodate a standard shoulder; this will enhance the safety of this area for cyclists and pedestrians.

Response to Comment L-6-8

This project will not restore the lagoon using transportation money, but will merely provide the best opportunity for restoration through the design and construction of a responsible replacement bridge. No transportation funds will be spent on non-transportation related projects; however, transportation funds will be spent on biological mitigation to compensate for project impacts.

Response to Comment L-6-9

The center median is being reduced to provide standard 5-ft inside shoulders. The right of way acquisition is not related to the need for additional roadway width. Instead, it is needed to comply it with the Los Angeles County Department of Public Works' 50 year burned and bulked flow requirements.

Response to Comment L-6-10

Caltrans' standard lane width is 12 feet and this will be provided within the project limits.

Response to Comment L-6-11

See the response to Comment L-6-7.

Response to Comment L-6-12

The residential property that you refer to would be required for Alternative 2; information regarding this property has been added to the appropriate sections within the Final Environmental Document. However, Alternative 3 has been selected as the preferred alternative; acquisition of residential property will not be required.

Response to Comment L-6-13

FEMA's Base Flood Elevation is for the 100-year event which is 7,040 cubic feet per-second (cfs); however, the channel is owned by Los Angeles County. The Los Angeles County Department of Public Works (LADPW) has calculated the 50-year burned and bulk flood as being over 11,000 cfs. In this case, Caltrans must first comply with the entity having jurisdiction over the channel, which has the more restrictive requirement. By satisfying the LADPW requirement, FEMA's standard will automatically be met.

Response to Comment L-6-14

Full road closures are not anticipated for this project; only lane closures will be required. Caltrans will maintain at least one lane open in each direction throughout construction. Therefore no detour routes will be employed by this project. The chapter and section that you cite is discussing in general terms what would happen to the community if the Trancas Creek Bridge is not replaced and fails due to scour resulting in road closure. Traffic Handling Plans will be included in the final set of plans and provided to the City prior to construction.

Response to Comment L-6-15

The correction has been made.

Response to Comment L-6-16

The correction has been made.

Response to Comment L-6-17

Vacant land on both the ocean and inland side of PCH will be affected. The discussion that you refer to has been rewritten for clarity.

Response to Comment L-6-18

The affected property owners and renter had been notified shortly before the May 25th meeting of Caltrans' need to acquire their property should Alternative 2 be selected. Since Alternative 3 has been selected as the preferred alternative, that property will not need to be acquired; temporary, short-term relocation will, however, likely be required during construction.

Response to Comment L-6-19

The accidents discussed in this section occurred within the project limits, between Guernsey Ave and Trancas Canyon Rd, between January 1, 2012 and December 31, 2014. Based on City of Malibu's "Pacific Coast Highway Safety Study", 10 of these

accidents occurred at Trancas Canyon Road; one (1) of them involved a vehicle making a right turn onto Trancas Canyon Rd.

Response to Comment L-6-20

Two lanes, one lane in each direction, will be kept open to the traveling public at all times. The text has been revised to reflect this.

Response to Comment L-6-21

The project has been assessed for both the FEMA 100 year flood scenario and the LACDPW Q50 Burned and Bulk flow scenario. The bridge structure is designed to accommodate both flood scenarios and both are discussed within the document.

Response to Comment L-6-22

The vertical clearance of 1.9-ft referred to is for Alternative 2 and was determined through a modal analysis without revising the existing bridge profile grade to accommodate the LACDPW 50 year burned and bulked flow. This number will be revised during the final design of the project. Although the LACDWP 50 year burned and bulked flow is much higher than the FEMA 100 year flood event, freeboard is not a requirement for LACDPW.

Response to Comment L-6-23

The Final Hydraulic Report will be provided to the City as requested.

Response to Comment L-6-24

The text has been revised to clarify this.

Response to Comment L-6-25

The vertical clearance of 0.4-ft referred to is for Alternative 3 and was determined through a modal analysis without revising the existing bridge profile grade to accommodate the LACDPW 50 year burned and bulked flow. This number will be revised during the final design of the project. Although the LACDWP 50 year burned and bulked flow is much higher than the FEMA 100 year flood event, freeboard is not a requirement for LACDPW.

Response to Comment L-6-26

A bike lane is not currently present along the landside of PCH anywhere near the project area. Installation of a bike path in this location would require that the roadway be widened and additional property acquired. It is not a part of the scope of

this project. A 6-ft wide bike lane for shared use with pedestrians and an 8-ft wide shoulder for parking will be provided on the ocean side.

Response to Comment L-6-27

Parking on the shoulder will be retained for the new design. However, due to utility placement we would need additional right of way and additional impacts to the private properties in order to accommodate for transits.

Response to Comment L-6-28

Additional right of way will be needed from the private properties in order to accommodate for pedestrian sidewalks which means additional impacts to adjacent properties and additional costs. With the selected Preferred Alternative, the new bridge structure will be able to accommodate for an undercrossing during dry seasons.

Response to Comment L-6-29

Riprap, instead of wing walls, is currently a part of the design to ensure the structural integrity of the bridge.

Response to Comment L-6-30

The right-turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

Response to Comment L-6-31

At this time this project is not expected to impact any septic systems. If septic systems are discovered within the project footprint the City and the property owner will be notified.

Response to Comment L-6-32

Updated right of way maps will be prepared and all parties whose properties may be affected will be notified. Caltrans aims to notify the owners of the affected properties as soon as the information becomes available.

Response to Comment L-6-33

The project team has analyzed the bridge replacement's impacts on the community and determined the replacement of the bridge itself will not adversely impact the existing community's character or cohesion (it will not be dividing the community or adding negative impacts to the community).

Additional mitigation measures have been incorporated for the Relocation and Real Property Acquisitions section.

Language has been added to the Visual Impacts and Natural Communities sections to indicate that the City of Malibu, as a delegate of the California Coastal Commission, has permitting authority related to the bridge railing design and impacts to Natural Communities.

Response to Comment L-6-34

The text has been modified to reflect the City of Malibu's permitting authority.

Response to Comment L-6-35

The property owners were notified and given time to provide comments during the 45 day comment period for the Draft IS/EA.

Response to Comment L-6-36

Your comment has been noted. Additional details of the project will be developed during the final design process; they will be provided to the City at that time.

Response to Comment L-6-37

The text has been corrected per your comment.

Response to Comment L-6-38

The text has been corrected per your comment. It is understood that the City Biologist will make a determination regarding the extent of the ESHA as part of the City's CDP process.

Response to Comment L-6-39

Modifications to the text have been made per your comment.

Response to Comment L-6-40

The text has been modified where appropriate to improve consistency.

Response to Comment L-6-41

The Malibu LUP Chapter 6, Section 6.3 has State Route 1 designated as a "Scenic Road." Route 1 (PCH) is a State Highway and listed on the State List of Highways eligible for official State Scenic Highway status. At present, however, neither the city of Malibu nor the County of Los Angeles has sought official State Scenic Highway designation for State Route 1 (PCH).

Response to Comment L-6-42

The project will be implemented pursuant to Malibu Municipal Code Section 8.24.050(G) and Section 8.24.060(D). The text has been modified to reflect this.

Response to Comment L-6-43

The California Coastal Commission Sea Level Rise Policy Guidance (8/12/2015) has been adopted by Caltrans since 2015. Caltrans has considered tidal influence, sea level rise, and tsunami hazard as part of the environmental review of this project. The hydraulic analyses were conducted accordingly. The new structure will be studied further as the project develops. In addition, a wave uprush study will be completed during the PS&E phase of the project. The analysis regarding sea level rise and wave uprush will be provided to the City for their review.



May 31, 2017

Ron Kosinski, Deputy District Director *RK*
 California Department of Transportation
 Division of Environmental Planning – District 7
 100 South Main Street, Suite 100
 Los Angeles, California 90012

**Trancas Creek Bridge Replacement Project
 Draft Initial Study / Environmental Assessment**

Dear Deputy District Director Kosinski:

The Mountains Recreation and Conservation Authority (MRCA) offers the following comments on the Trancas Creek Bridge Replacement Project Draft Initial Study/Environmental Assessment (Draft IS/EA).

Overall Comments

MRCA agrees that a replacement bridge is needed at this location for the reasons described in the Draft IS/EA regarding structural deficiencies, stormwater scour issues, and public safety.

MRCA finds the longer bridge design of Alternative 3: Long Bridge Replacement (240' span) critical to accomplish Caltrans' goal of providing safe, reliable infrastructure for a multi-modal travelling public. MRCA further supports Caltrans' decision to choose Alternative 3 as the most viable build alternative to facilitate enhancement of Trancas Creek and Trancas Lagoon.

L-7-1

Specific Comments

Parking

MRCA is pleased that no permanent loss of public parking will result from the proposed project; however, the Draft IS/EA must include greater details regarding how the existing parking will be retained while accommodating the utility poles within the Caltrans' right-of-way.

L-7-2

Bike Path

Both build alternatives describe a Class II bike path along the southbound side of PCH. MRCA supports this project element for public access and multi-modal transportation. However, the

L-7-3

Ron Kosinski, Deputy District Director
Trancas Creek Bridge Replacement Project Draft IS/EA
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Page 2

Trancas Creek Bridge is the only north-south vehicular connector in the vicinity and bicyclists must also travel northbound across the bridge. Therefore, MRCA recommends that Caltrans analyze the feasibility of including a Class II bike path (minimum 6-foot wide with posted speed limit greater than 40 mph) for northbound cyclists as well.

↑
L-7-3

Could a northbound, Class II bike path be accommodated within the current design width of Alternative 2 or Alternative 3? Would it displace parking on the southbound side? If so, how many parking spots would be impacted?

L-7-4

Pedestrian Access

The Draft IS/EA cites the Caltrans and City of Malibu’s Pacific Coast Highway Safety Study (2015) as recommending “... that a sidewalk be installed along the southbound side of PCH from the signal at Trancas Canyon Road to Zuma Beach **and** that a pedestrian underpass be constructed to allow for crossing PCH at the Trancas Creek Bridge” (bold emphasis added).

Because the proposed project does not include the installation of a sidewalk along the southbound side of PCH from Trancas Canyon Road to Zuma Beach, it is imperative that the proposed project include Alternative 3’s pedestrian undercrossing adjacent to the southern bank of Trancas Creek. Diverting pedestrian traffic away from PCH would not only increase pedestrian safety but also the safety of bicyclists and motorists between Trancas Canyon Road and Zuma Beach.

L-7-5

In addition, Alternative 3’s pedestrian undercrossing would increase public access to Trancas Canyon and the National Parks Service listed Chumash Indian Trail that connects Trancas Canyon to the ridgeline on Zuma Canyon Motorway.

Habitat Restoration

The Draft IS/EA references potential efforts by the Resource Conservation District of the Santa Monica Mountains and the Los Angeles County Department of Public Works to restore both Trancas Lagoon and Trancas Creek (respectively). As indicated in the Draft IS/EA, “[s]hould both of these come to fruition, the new Trancas Creek Bridge would need to be longer than the current bridge ...” and longer than build Alternative 2. Further, “... any future project to lengthen the bridge would have to go through its own environmental review and design process ...” that would result in increased total costs and time delays for those future projects.

L-7-6

MRCA believes that the longer bridge (240’ span of Alternative 3) would not only facilitate potential lagoon and creek restoration but also allow the “wider mouth” to accommodate increased stormwater outflow or tidal and storm-surge inflow/outflow events exacerbated by climate change.

L-7-7

Ron Kosinski, Deputy District Director
Trancas Creek Bridge Replacement Project Draft IS/EA
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Page 3

Thank you for your consideration. Should you have any questions, please contact Chad Christensen by phone at (310) 589-3230, ext. 135 or by email at chad.christensen@mrca.ca.gov. I can be reached by phone at (310) 589-3230, ext. 128 or by email at paul.edelman@mrca.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Paul Edelman', with a long horizontal flourish extending to the right.

Paul Edelman
Chief of Natural Resources and Planning

Response to Comment L-7-1

The selected Preferred Alternative is Alternative 3. Thank you for your review.

Response to Comment L-7-2

The entire existing parking area at Zuma Beach and on PCH will be preserved with the new bridge structure.

Response to Comment L-7-3

The addition of a Class II bike path along the northbound side will require additional takings of right of way and will impose additional burdens onto adjacent private properties while maintaining existing vehicular service. The option has been assessed by Caltrans and deemed not feasible at this time. Any existing parking along the side of PCH will also have to be eliminated to minimize right of way take from private properties and make room for the bike lane.

Response to Comment L-7-4

The addition of a Class II bike path along the northbound side will require additional takings of right of way and will impose additional burdens onto adjacent private properties while maintaining existing vehicular service. The option has been assessed by Caltrans and deemed not feasible at this time. Any existing parking along the side of PCH will also have to be eliminated to minimize right of way take from private properties and make room for the bike lane.

Response to Comment L-7-5

The selected Preferred Alternative will be able to accommodate for a pedestrian undercrossing under the bridge which will increase public recreational access to the lagoon and the beach.

Response to Comment L-7-6

Noted, References from within the document.

Response to Comment L-7-7

The Preferred Alternative is the longer bridge replacement option. Thank you for your review and suggestion.

J.4 Businesses and General Public (G Series)

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DEPARTMENT OF ECOLOGY AND EVOLUTIONARY BIOLOGY
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30 April 2017

FAX: (310) 206-3987

Carrie Bowen, Director
Ronald J. Kosinski, Deputy Director of Env. Planning
Caltrans District 7
100 S. Main Street
Los Angeles, CA 90012

Dear Director Bowen and Deputy Director Kosinski:

I write you today to strongly advocate for the longer bridge alternative for the Trancas Creek Bridge Replacement Project on Pacific Coast Highway.

G-1-1

My laboratory at UCLA has a long-term research interest in developing a better understanding of the physical processes, historical ecology and endangered species genetics and biology of California's coastal lagoons, including Trancas Lagoon. Smaller lagoon systems in particular are understudied, and contribute significant underappreciated ecological services including trapping runoff so it can sustain local ground water and riparian habitat, providing a range of temporally varying wetland habitats, and generating habitat for several endangered taxa and endemic species of special concern.

G-1-2

Transportation infrastructure impacts the great majority of lagoonal systems across the state by confining the mouth and consequently the lower stream valley to a fixed location relative to historic conditions. This lateral confinement by abutments precludes lateral movement of the mouth and lower stream. Lateral movement and associated scour during high flow removes sediment from the system. The opportunity for lateral movement also generates a suite of, rather than just one scour feature, on the landscape. Scouring rejuvenates systems and the multiplicity of scour features provides a range of habitats suitable for a variety of species while providing refuges from climate extremes of flood and drought for many species. Moreover, lagoons are typically the last areas to retain fresh surface water near the coast in California.

G-1-3

The restoration at Trancas Creek would greatly benefit from a longer bridge in that a broader area of the lagoon would be subject to rejuvenating lateral flows and sediment removal by natural process. Thus, an investment in a longer bridge should render the restored area more self-sustaining, and reduce long-term maintenance. This should limit the need or frequency of restoration such as the large recent expenditure on a second restoration effort at Malibu Lagoon.

G-1-4

If restoration at Trancas Creek can be sustained, in significant part due to the longer bridge, there will be a number of potential benefits in terms of ecological services and wildlife values for the public, as noted above, as well as to endangered species. The genetically distinct Ventura/Los Angeles management unit of the endangered Tidewater Goby (*Eucyclogobius newberryi*) is now limited to a handful of widely separated lagoons from the Ventura River to Topanga Canyon Creek. This fish species is generally thought to disperse between lagoons during flood years. If even an intermittent population of tidewater gobies could be established at Trancas Lagoon, this would significantly enhance the dispersal of these fish, their recolonization potential, and the probability of long-term persistence of the management unit. Other species such as the California Red-legged Frog (*Rana draytonii*) could potentially reproduce in a system such as Trancas Creek as they do in a number of Southern California lagoonal systems.

G-1-5

Sincerely,



David K. Jacobs
Professor
Department of Ecology & Evolutionary Biology
University of California, Los Angeles

Response to Comment G-1-1

Your comment has been noted.

Response to Comment G-1-2

Your comment has been noted. Lagoons provide a variety of ecological functions that are important to the health of coastal zones.

Response to Comment G-1-3

It is expected that the construction of a longer bridge will alleviate some of the detrimental effects on scour that you mention. Restoration of the lagoon would further repair some of the damage that it has suffered over the years.

Response to Comment G-1-4

It is expected that the construction of a longer bridge, combined with the lagoon restoration project, will bring the lagoon back to a more self-sustaining condition.

Response to Comment G-1-5

Trancas Creek is not currently designated as critical habitat for the Tidewater Goby nor the Ca. Red-legged Frog (per USFWS, IPaC, ecos, Office USFWS Species List, Updated 2/8/2017). It is not currently suitable habitat for either species. Should the lagoon be restored (including a longer bridge), then the potential for these species to return will increase.

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hans laetz, j.d.

6402 surfside way / malibu ca 90265

hanslaetz@gmail.com / office, cell, home (424) 442-ZUMA (6972)

**Trancas Creek Bridge Replacement Project
Initial Study / Environmental Assessment
Section 4(f) Evaluation
State Route 1, Malibu CA**

Comments of Hans Laetz, Representing Surfside Way Residents

The undersigned represents an ad hoc group of residents who own property within several hundred yards of the proposed replacement of the Trancas Creek Bridge on Pacific Coast Highway, State Route 1, in Malibu. Thank you for the opportunity to comment on this most worthy project, captioned above and referred to here as the IS/EA.

There are a few major design flaws that must be addressed, and a few errors that must be corrected.

1. The bridge may not be high enough for rising ocean levels.

The elevation of the current and proposed bridges - in the context of global ocean rise, increased storm intensity and a high tide line that has moved 75 feet towards the bridge in two decades - are not adequately discussed in the IS/EA. On page 2-70 of the IS/EA, the Base Flood Elevation is described as 18.4 feet, and the proposed bridge structure would feature a lowest soffit elevation of approximately 20.5 feet on the upstream side and 20.3 feet on the downstream side.

In 1998, three-foot breakers were observed washing northward under the bridge, atop an incoming high tide, as a heavy storm flow coursed southward. The mouth of the creek at the ocean is less today than 150 feet away from the bridge, and that tide line has moved 75 feet towards State Route 1 in the past 20 years (source: Broad Beach Geologic Hazard Assessment District - <http://www.bbghad.com/about-the-project/>). The repeat of ocean waves pushing up the creek, as observed in the 1998 floods, is not discussed in the IS/EA. Such conditions can only be reasonably expected to recur in greater severity as ocean tides increase - meteorologists already report that peak high tides are cresting one foot above historic levels at Zuma Beach.

The IS/EA plainly shows that PCH at the bridge and its approaches is underneath the 100-year flood contour as estimated by FEMA (see figure 2-17 in the IS/EA, page 2-57). If the highway is within the current 100-year-food level, how can it possibly be operational when future flood levels will be aggravated by tidal surges, wave uprush and stronger storms that are already observed at Trancas?

G-2-2

Yet, Caltrans concludes that “the proposed bridge would have sufficient vertical clearance to remain fully above water during a 100-year flood.” But what if such flood occurs during not-unusual, reasonably predictable conditions, such as

- during a storm
- at high tide
- with an ocean edge that has moved close to the highway
- as large waves break in the creek itself under the bridge, as in 1998,
- atop an ocean that is 1-3 feet higher than historic levels?

G-2-3

Instead of an honest discussion and evaluation of global sea level increases and their impact on a bridge with an underside elevation of 20.5 feet, Caltrans kicks the can:

“Caltrans continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise. Currently, Caltrans is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, Caltrans has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, Caltrans will be able review its current design standards to determine what changes, if any, may be needed to protect the transportation system from sea level rise. (IS/EA at page 2-238) ”

G-2-4

So, Caltrans here merely closes it eyes to the elephant in the room. Engineers neglected to compute aggravated BFE levels caused by wave uprush, which will be aggravated by global warming in the form of rising sea levels, and more severe storm events.

An \$11 million dollar bridge just two feet above the minimum level to handle creek floods - but not ocean wave uprush atop higher ocean levels atop the flooded creek - is proposed. Caltrans at the very least has not reported in the IS/EA whether such calculations for a worst-case combination of high tides, big waves, sea level rise, more-severe storms and floods has been evaluated or addressed. The absence of state wide planning scenarios cannot be an excuse or justification for designing a brand-new bridge that may - or may not - be underwater in five, 10, 20 or 40 years.

G-2-5

The IS-EA should be modified with alternates (short and long) that include raising the deck of the bridge to a level reasonably above the combined ocean level/storm surge/wave uprush/downstream flow that can be anticipated during the expected lifespan of the bridge.

G-2-6

2. Bike Lane inaccurately described.

The IS/EA omits mention that northbound State Route 1 is a Class III bike route, and that the stated reason for southbound SR-1 being a Class II bike route was due to the heavy amount of on-street beach access parking along SB SR-1 at Zuma Beach. It also does not accurately describe the heavy bicycle use of the highway here.

G-2-7

The IS-EA should be modified to reflect this correction, and provisions for handling both directions of heavy bike traffic across the bridge.

3. Caltrans has placed the pedestrian area on the wrong side of the highway!

Incredibly, Caltrans is putting the pedestrian walking area on the wrong side of the road! The IS/EA calls for “a standard 8-foot northbound shoulder, and a **southbound** shoulder that is 14 feet wide to accommodate a 6-foot bicycle **and pedestrian use.**” It inaccurately states that the City of Malibu’s PCH Traffic Safety Plan calls for “a sidewalk (to) be installed along the **southbound** side of PCH from the signal at Trancas Canyon Road to Zuma Beach and that a pedestrian underpass be constructed to allow for crossing PCH at the Trancas Creek Bridge (emphasis added).”

G-2-8

The city plan does not call for a sidewalk on the southbound side of the road. It calls for an underpass for pedestrians to cross under PCH next to the creek, and a sidewalk to the Trancas Country Market. People cannot walk through the environmentally-sensitive creek bottom to get from the beach to the underpass, thus the underpass must be on the creek’s east bank. Thus, by function of necessity, the PCH walking area (or sidewalk) must be on the north side of PCH, from the northern end of the underpass on the east side of the creek to the market, along the north side of PCH.

G-2-9

In addition, if it the sidewalk/walkway were to be placed on the south side of the coast highway, it would divert pedestrians away from the underpass, and encourage jaywalking to the market — it is a long walk to the Trancas Canyon Road signal and then doubling back to the market. Further discouraging pedestrian use of the signal are the left turn movements from southbound Trancas Canyon Road to eastbound PCH (southbound SR-1), which have caused Caltrans to currently ban pedestrian crossing of PCH on the east side of Trancas Canyon Road at the signal. A lawful pedestrian would have to

G-2-10



negotiate three street crossings to make use of the proposed southside sidewalk — and not use the proposed underpass - to get from the market to the beach.

↑ G-2-10

Putting the pedestrian walkway on the north side of the highway - to connect the market to the underpass - is the only way to divert pedestrian crossings to the underpass.

| G-2-11

This recommendation was made loudly and plainly clear at the scoping session and it is shocking that Caltrans would get this wrong.

| G-2-12

Plans should be redrafted to place the pedestrian creek passageway next to the highway on the north, northbound side of SR-1, to link the beach and the underpass to the visitor-serving retail at Trancas Country Market. The IS/EA should reflect be modified to reflect plans to place the extra space for pedestrians on the north side of the road.

| G-2-13

4. Rip rap description is incorrect.

On page 1-5, the existing bridge has a history of scour-related issues is incorrect. It states that the wing wall on the bridge's northeast side suffered erosion in 1998 and was buttressed by riprap. The 1998 erosion was on the northwest side, and that emergency riprap is plainly visible today on the west bank of the creek, north of the bridge, adjacent to Trancas Market.

| G-2-14

Plans should include wing walls or other protective structures for the northwest side of the bridge, and the IS-EA modified to reflect that.

5. Right turn lane from NB SR-1 to driveways and Trancas Canyon Road.

Not mentioned whatsoever is any mention of the dangerous conditions on NB SR-1 at the two Trancas Country Market driveways immediately west of the bridge. There, traffic flows at an average speed of 58 miles per hour per Caltrans traffic radar surveys - the speed limit transitions from 50 to 55 at the intersection. Just west of the bridge, but within the project area, cars turn right to access the Trancas Country Market and Trancas Canyon Road.

| G-2-15

As stated above, the bridge should not be rebuilt unless its deck and soffits are placed above anticipated high water marks. As the IS/EA notes, this will require raising the elevation of the highway at Trancas Country Market's driveways. That will require Caltrans to build turn lanes for traffic to decelerate, yield to pedestrians and negotiate the tight turns into the driveways. These right turn lanes must begin either on the new bridge, or just west of it. This will drive up the cost of the project, but it is the last chance

| G-2-16
↓

to fix design flaws that Caltrans and the City of Malibu allowed to slip through when Trancas Country Market was expanded five years ago.

Plans should be drawn for a higher bridge and approach elevations, and right turn lanes from NB SR-1 into the Trancas Country Market driveways, and Trancas Canyon Road. The impact of these changes should be analyzed in an amended IS/EA, and should caltrans elect not to pursue these safety changes, the IS/EA must be amended to analyze the agency's failure to do this.



G-2-16

6. Conclusion.

Thank you.

Hans Laetz

Response to Comment G-2-1

The Broad Beach GHAD website that you reference was reviewed on 6/29/2017; there was no mention of the 1998 storm event. The 1998 February storm event did cause mudslides in many places along the southern California coast, including Malibu. There are many reasons mudslide occurs. Various types of soil and vegetation combine with types and sizes of storm. Caltrans is aware of the severity of the situation. Hence, a high tidal elevation of 5.24' (average high tide from a tidal station roughly 1.5 miles south of the project location monitored by NOAA) was studied in combination with sea level rise (5.48'). A mud/debris flow (burned & bulking) of 11,900 cubic feet per second (cfs), which came from a location hydrology study conducted by LA county, was included in our hydraulic analyses. A flow of 11,900 cfs is 1.7 times bigger than FEMA's 100-year flood event (7040 cfs). The elevation of the replacement bridge was designed to accommodate all of these factors.

Response to Comment G-2-2

The elevation of the Long Bridge Alternative was evaluated under a scenario which combined a high tide, sea level rise, and the 50 year burned and bulked flow (11900 cfs) (which exceeds FEMA's 100-year flood event (7040 cfs)) for the project site. It was concluded that the elevation of this alternative is sufficient to withstand this worst-case scenario.

Response to Comment G-2-3

See response to Comment G-2-2.

Response to Comment G-2-4

The text that you cite is valid from a state-wide perspective. However, this project has been evaluated to address sea level rise and other factors that can affect the hydrologic capacity of the bridge.

See response to Comment G-2-2.

Response to Comment G-2-5

See response to Comment G-2-4.

Response to Comment G-2-6

See response to Comment G-2-2. The Short Bridge Alternative was subjected to equal scrutiny and, as a result, was proposed to be raised 2-1/2 feet above its current elevation.

Response to Comment G-2-7

Your comment regarding bike use on PCH is correct. This project will add an 8 foot wide shoulder to the northbound side of the bridge and the adjacent roadway. This wider shoulder will allow more room for the pedestrians and bikers on PCH.

Response to Comment G-2-8

With the selected Preferred Alternative, the new bridge structure will be able to accommodate for a pedestrian undercrossing during dry seasons.

Response to Comment G-2-9

Pedestrian undercrossing is not feasible on the north end of the bridge because of the position of creek. We would need to redirect the creek channel in order to put in the undercrossing which is also not beneficial for the environment and will require approval from other resource agencies.

Response to Comment G-2-10

See Comment Response G-9.

Response to Comment G-2-11

See Comment Response G-9.

Response to Comment G-2-12

See Comment Response G-9.

Response to Comment G-2-13

See Comment Response G-9.

Response to Comment G-2-14

Rip-Rap scour protection for all abutments are within our design plans. In addition, abutments will also be built on pile foundations which will provide enough depth to avoid scour damage.

Response to Comment G-2-15

The right turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

Response to Comment G-2-16

Caltrans is aware of the severity of the situation. Hence, a high tidal elevation of 5.24' (average high tide from a tidal station roughly 1.5 miles south of the project location monitored by NOAA) was studied in combination with sea level rise (5.48'). A mud/debris flow (burned & bulking) of 11,900 cubic feet per second (cfs), which came from a location hydrology study conducted by LA county, was included in our hydraulic analyses. A flow of 11,900 cfs is 1.7 times bigger than FEMA's 100-year flood event (7040 cfs). The elevation of the replacement bridge was designed to accommodate all of these factors.

Guest 1

From: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Sent: Friday, May 26, 2017 4:05 PM
To: Patrick Kallas; Cayla McDonell
Subject: FW: Trancas Creek Bridge Repair, Alt 3 Support

[One more comment.](#)

Christine Lan

Asso. Environmental Planner
California Department of Transportation
 100 South Main Street, MS 16 A
 Los Angeles, CA 90012
 (213) 897-2936 | christine.lan@dot.ca.gov

From: Price, Karl F@DOT
Sent: Friday, May 26, 2017 3:57 PM
To: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Subject: Fw: Trancas Creek Bridge Repair, Alt 3 Support

Another Trancas comment.

Karl Price
 Senior Environmental Planner
 Division of Environmental Planning
 Caltrans - District 7
 213-897-1839

From: Kosinski, Ron J@DOT
Sent: Friday, May 26, 2017 3:54 PM
To: Price, Karl F@DOT
Subject: FW: Trancas Creek Bridge Repair, Alt 3 Support

[Well FYI add to the e-mail comments](#)

From: Brody [<mailto:4brody@gmail.com>]
Sent: Friday, May 26, 2017 2:31 PM
To: Kosinski, Ron J@DOT <ron.kosinski@dot.ca.gov>
Subject: Trancas Creek Bridge Repair, Alt 3 Support

Wholeheartedly support Alternative 3 Long Bridge (240' span). It's the right thing to do for habitat and long term sustainability.
 Thanks you and have a great long weekend,

G-3-1

Response to Comment G-3-1

Your comment is noted. Thank you for your support.

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Guest 1

From: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Sent: Tuesday, May 30, 2017 9:39 AM
To: Cayla McDonell; Patrick Kallas
Cc: Price, Karl F@DOT
Subject: FW: Follow up on our call - 30712 pCH
Attachments: 29140 Public Notice NOA and Public Hearing.pdf; ATT00001.htm; Caltrans Trancas Creek Notice-3.pdf; ATT00002.htm

Comment from public stakeholder.

Christine Lan

Asso. Environmental Planner
California Department of Transportation
 100 South Main Street, MS 16 A
 Los Angeles, CA 90012
 (213) 897-2936 | christine.lan@dot.ca.gov

From: Jeff Lotman [<mailto:Jeff.Lotman@globalicons.com>]
Sent: Friday, May 26, 2017 4:38 PM
To: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Cc: Jeff Lotman <Jeff.Lotman@globalicons.com>; Therese Lotman <therese@thereselotman.com>
Subject: FW: Follow up on our call - 30712 pCH

Hi Christine,

It was good talking to you today. I am glad to hear that the shorter bridge option – which would cause you to buy out the Kliens house next to mine at 30712 PCH will probably will not happen. I would like to see the drawings that would show if that option were to happen and what it would look like after it was done. Specifically what the land next to mine would look like and how it would be protected from the smell and the transients that live under that bridge.

G-4-1

As I told you, Greg Hannley – the tenet has told me that on repeated occasions they have tried to come into his house – the last one was just a month ago and tried to break into his house. As it turned out he was wanted for murderer which 8 cops had to come to get him. As I told you we have 2 small girls in this house – having the risk and continued threat is not appealing to us.

G-4-2

It will come as to surpass then to you that we do NOT want the shorter bridge option. Our property is valued almost 2X what his is due to privacy, the size of the lot and the newness of construction, and this would cause the property value to seriously be diminished.

G-4-3

In conclusion – please keep us informed what the next steps and timing are to the decision making process and if the option of the shorter bridge starts to look like it could be a viable option, pls reach out to me at +1-310-873-3560 - office or cell at +1-310-800-4485.

Best Regards,

G-4

Thérèse and Jeff



Jeff Lotman
CEO
Global Icons LLC
12400 Wilshire Blvd Suite 1400
Los Angeles CA 90025
Direct Line +1 310 873 3560

jeff.lotman@globalicons.com
www.globalicons.com

Los Angeles | Detroit | London | Munich | Hong Kong

From: Malibu Films <greg@malibufilms.com>
Date: Friday, May 26, 2017 at 9:52 AM
To: Jeff Lotman <Jeff.Lotman@globalicons.com>
Subject: Fwd: Follow up from Christine Lan, Caltrans

christine.lan@dot.ca.gov

Response to Comment G-4-1

The design plans you are requesting would normally be completed during the final design phase. However, since Alternative 2 was not selected as the preferred alternative, plans for that alternative will not be prepared (we only prepare final plans for the preferred alternative).

Response to Comment G-4-2

Your comment is noted. The Short Bridge Alternative was not selected as the preferred alternative and the Klein property will not need to be acquired.

Response to Comment G-4-3

The Long Bridge Alternative has been selected as the preferred alternative.

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Patrick Kallas

From: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Sent: Monday, June 05, 2017 1:42 PM
To: Patrick Kallas; Cayla McDonell
Subject: FW: Comment letter: Trancas Creek Bridge Repair

Additional Comment.

From: Price, Karl F@DOT
Sent: Monday, June 05, 2017 11:34 AM
To: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Subject: Fw: Comment letter: Trancas Creek Bridge Repair

Karl Price
Senior Environmental Planner
Division of Environmental Planning
Caltrans - District 7
213-897-1839

From: Kosinski, Ron J@DOT
Sent: Tuesday, May 30, 2017 9:57 AM
To: Price, Karl F@DOT
Subject: Comment letter: Trancas Creek Bridge Repair

FYI

From: Lizzy Montgomery [<mailto:montgomerylizzy@gmail.com>]
Sent: Monday, May 29, 2017 10:42 AM
To: Kosinski, Ron J@DOT <ron.kosinski@dot.ca.gov>
Subject: Comment letter: Trancas Creek Bridge Repair

5-29-17

Ron Kosinski, Deputy District Director
Caltrans District 7
Division of Environmental Planning
100 S. Main Street MS-16A
Los Angeles, CA 90012

To Ron Kosinski and Caltrans District 7,

I support the building of Alternative 3 for the Trancas Creek Bridge Replacement Project, to construct a 240 ft. bridge in place of the current structure. Working in 2013-2016 as a fisheries technician in Trancas and adjacent coastal creeks of the Santa Monica Mountains historically populated by steelhead trout and other native

G-5-1

aquatic species, as well as completing a vegetation survey of the greater Trancas Lagoon area for a graduate class, I have an intimate knowledge of the area of interest's current state, and potential restoration outcomes.

The longer bridge is a model for future road repair and maintenance along the Pacific Coast, which should be designed to accommodate for the predicted changes to coastline topography including sea level rise and incidence of mudslides, as well as the much needed restoration and conservation of coastal wetlands.

G-5-2

A larger, more ecologically diverse wetland made possible by a longer bridge span will provide shoreline protection during storms and under an uncertain climate future. The conservation of areas already supporting dense, native wetland plants, and restoration throughout the parcel's full extent, will reduce erosion, buffer surrounding communities from storm events, and could improve water quality for generations of beach goers to come.

G-5-3

Great effort should be taken to minimize the land area that will have concrete paving, and I recommend the consideration of wooden plank construction for the ADA walkway. This would cause less fragmentation of the natural landscape, and serve as a visual reminder to visitors that the project has been designed to respect the natural landscape. Areas designed for human use should be minimized to the utmost degree possible to support a 'wild' landscape and to reap all of the benefits restored wetland habitat can provide.

G-5-4

Sincerely,

Elizabeth Montgomery

PhD Student Forest Science
School of Forest Resources and Environmental Science
Michigan Technological University

Response to Comment G-5-1

Your comment has been noted.

Response to Comment G-5-2

The impact of sea level rise and the potential for land movement are evaluated for every coastal project carried out by Caltrans. Restoration and conservation of coastal wetlands are important community efforts that the Department will continue to support wherever possible.

Response to Comment G-5-3

The Long Bridge Alternative was selected as the preferred alternative in part because it provides the most hydrologic benefit with fewer impacts to the community.

Response to Comment G-5-4

Your suggestion for using wooden plank construction for the ADA walkway is interesting and will be considered. Our goal is to construct a bridge and supporting features that are visually appealing, yet unobtrusive, and which do not detract from the visual character of the natural landscape.

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June 1, 2016

Ron Kosinski,
100 S. Main Street MS-16A
Los Angeles, CA 90012

Dear Mr. Kosinski:

I attended the most recent Cal Trans meeting at the Malibu West Swimming Club and have the following comments on the proposed reconstruction of the Trancas Bridge.

My preference is for the Long Bridge (240' span) for the following reasons:

- It will be at the current road elevation,
- It will also provide for the restoration of the Trancas Lagoon.
- It will not require the taking of the home adjacent to the creek
- It will provide for safe access from the landside of PCH to Zuma Beach.

G-6-1

My concern is that the construction of the bridge will take 2 years and the inconvenience it will cause the surrounding neighbors and those traveling PCH. For this reason I would recommend you construct the bridge off site and then install the prefabricated bridge on site. I understand this is possible and it has been done elsewhere.

G-6-2

If this solution is not possible as an alternative please hasten the project as you did with the rebuilding of the Malibu Creek Bridge.

G-6-3

Thank you for considering my comments.

Sincerely,
Patt Healy
6085 Paseo Canyon Drive
Malibu 90265

Response to Comment G-6-1

Thank you for your comment. The reasons you cite are some of the reasons that the Long Bridge Alternative was selected as the preferred alternative.

Response to Comment G-6-2

All possibilities will be considered to expedite construction of the bridge and reduce the impacts and inconvenience to the community.

Response to Comment G-6-3

All possibilities will be considered to expedite construction of the bridge and reduce the impacts and inconvenience to the community.

Patrick Kallas

From: Lan, Christine@DOT <christine.lan@dot.ca.gov>
Sent: Tuesday, June 06, 2017 10:06 AM
To: Patrick Kallas; Cayla McDonell
Subject: FW: Support for Alternative 3 Trancas Creek

Short comment...

From: Kosinski, Ron J@DOT
Sent: Thursday, June 1, 2017 12:53 PM
To: Price, Karl F@DOT
Subject: FW: Support for Alternative 3 Trancas Creek

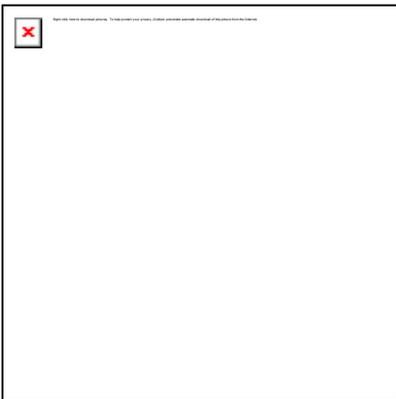
[A comment](#) sent

From: Jim Burns [<mailto:lariverflyfishing@gmail.com>]
Sent: Thursday, June 01, 2017 11:59 AM
To: Kosinski, Ron J@DOT <ron.kosinski@dot.ca.gov>
Subject: Support for Alternative 3 Trancas Creek

Dear Mr. Kosinski,

I support the above alternative to remove what seems to me a potentially dangerous structure along a section of Pacific Coast Highway that is well traveled. | G-7-1

As the author of www.lariverflyfishing.com, I also advocate for the potential return of southern california steelhead and restoring this lagoon could certainly help in their return. | G-7-2



[lariverflyfishing](http://lariverflyfishing.com)

www.lariverflyfishing.com

Fishing for carp, waiting for steelhead

Thank you for your consideration.

Sincerely,

Jim Burns

G-7

Response to Comment G-7-1

Thank you for your support.

Response to Comment G-7-2

Replacement of the existing bridge with a longer structure is one element that is needed to restore conditions that are potentially suitable for steelhead trout.

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To the powers that be!

I am a fifty year plus resident of the Trancas /Malibu area. I moved to Malibu West in 1966 with my mother. We are original members of the MWSC. My wife and I purchased our own home in MW in 1986 and have raised two children who have cherished this beach neighborhood. I have had the privilege to hike the Trancas canyon from the top to the ocean many times over the past five decades. I have first hand experience of the impact that the top ten winter storms have had on and below the structure of the bridge. These diverse perspectives and my duties as a L.A. County Lifeguard at Zuma Beach for 41 years has afforded me a multi level familiarity with the many factors that need to be addressed before the proposed plans for replacing the Trancas Creek Bridge continues to be considered. I have photos of the under belly of the structure in 2016 and recent 2017 photos of how there is little change after the last season’s historical rain fall data. My home is right next to the drainage channel and I have had a bird’s eye view of the flow on the most threatening conditions. The bridge has always been a well-designed and solid structure and will continue to serve us well with some targeted repairs.

G-8-1

G-8-2

My work as a aquatic event promoter has afforded me a broad perspective in dealing with a multitude of State and local beach communities shared use issues. I understand the politics with this type of posturing. With that said, I have compiled the following GOOD, BAD and UGLY bullet points for the CALTRANS interest and the Malibu City Council consideration before this life threatening plan moves forward.

THE GOOD

Many paid Caltrans consultants and environmentalist are getting a paycheck in developing these plans. The steel head trout lobbyist may get some funding.

G-8-3

The Bridge could be restored without tearing it down and the money saved could be allocated towards beautifying the bridge and the surrounding environment.

G-8-4

The Malibu City Council has final say.

G-8-5

THE BAD

There will be major traffic gridlock for the north of Morning View/PCH commuters.

Broad Beach and Malibu West residents will need to add 30 minutes (minimum) to their drive time in and out, not counting the heavy beach traffic during the summer. Multiply that conservative estimate by 2 years and it equate to 200 to 400 hours of sitting in traffic.

G-8-6

THE UGLY

Major environmental impact on the natural beauty of the open space

G-8-7

Condemning landmark homes for Eminent Domain purposes.

G-8-8

Emergency services response time for most of the year will be compromised north and south of Trancas Canyon Road. (Minutes can make a difference in saving a life)

G-8-9

Lives and Homes will be lost when the Fire Department cannot access the area during one of 60 plus days of beach grid lock traffic during the fire season.

G-8-10

The privilege of having the good fortune of living in one of the most beautiful places on earth has strengthened my resolve to protect our community from this unnecessary and dangerous plan. The two replacement options that include impeding already taxed traffic flow and blocked emergency vehicle access should be taken off the table. The repair and restore option should be paramount to eliminate the liability of the decision makers that will be levied due to the strong probability of choked off access for the emergency response agencies. I will make resources available to help find solution for a less expensive and environmentally friendly design to restore this iconic Malibu treasure. **Respectfully, Scott Hubbell**

G-8-11

G-8-12

Response to Comment G-8-1

Department review indicates that a 10 year storm event, and subsequent scour, has the potential to cause significant damage to the structure and lead to the closure of the bridge to traffic. The fact that the bridge survived the heavy rains of 2016-2017 does not change the fact that the bridge has long out lived its design lifespan and is vulnerable to scour.

Response to Comment G-8-2

The 90-year old bridge was designed to last 50-years and can no longer be repaired with scour mitigation to ensure structural stability. If it is not replaced, the bridge will remain vulnerable to scour and potential failure during a 10 year storm event.

Response to Comment G-8-3

There is a documented need to replace the bridge. The work being done is warranted and justified. It would be much more costly, in terms of money, inconvenience to the community, and environmental impacts, to let the bridge fail and have to replace the bridge under an emergency contract.

Caltrans is coordinating closely with the Resource Conservation District of the Santa Monica Mountains (not the steelhead lobbyists) as a prudent way to increase efficiency, maximize environmental benefits, and reduce potential conflicts between the bridge replacement project and the lagoon restoration.

Response to Comment G-8-4

See the response to Comment G-8-2 and Comment G-8-3 (paragraph 1).

Response to Comment G-8-5

The project will be presented to the Malibu City Council for approval.

Response to Comment G-8-6

Caltrans is aware of the potential traffic impacts resulting from construction. Construction techniques will be employed, and a Traffic Management Plan will be developed, that minimizes traffic disruptions as much as possible.

It is Caltrans' intent to keep one lane in each direction open at all times during construction. This would not be the case if the bridge were allowed to fail. In such a situation, PCH would be closed completely for an extended period of time and lengthy detours would be required while a new bridge is constructed.

Response to Comment G-8-7

Construction is not pretty. But, it will be done in a way that minimizes impacts to the natural environment and open space. All temporarily disturbed areas will be restored and mitigation for permanent impacts will be on-site if possible. In addition, the Long Bridge Alternative will allow for greater flow of water into and out of the lagoon and provide opportunities for lagoon restoration.

Response to Comment G-8-8

Alternative 3 has been selected as the preferred alternative and does not require the acquisition of residential property. As a matter of policy, any property that needs to be acquired is fully evaluated by qualified Caltrans' specialists. Caltrans also follows the guidelines of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) which dictates the standards for federally funded projects that require the acquisition of real property or displacement of person from their homes, businesses, or farms (49 CFR Part 24).

Response to Comment G-8-9

A Traffic Management plan will be developed to minimize traffic impacts and delays in emergency service response times. The plan will be shared with emergency service providers for review and comment prior to construction.

Response to Comment G-8-10

A Traffic Management plan will be developed to minimize traffic impacts and delays in emergency service response times. The plan will be shared with emergency service providers for review and comment prior to construction.

Response to Comment G-8-11

Please see the responses to Comments G-8-2, G-8-6, and G-8-10.

Response to Comment G-8-12

Please see the responses to Comments G-8-2, G-8-6, and G-8-10.

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J.5 Public Hearing (PH Series)

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Trancas Creek Bridge Replacement Project

Thursday, May 25, 2017

Malibu West Beach Club

Comment Sheet

PH-1

Thank you for interest in the Trancas Creek Bridge Replacement Project. Please complete the contact information below and indicate the best way to reach you if would like to receive updates on the project.

Contact Information

Name: Joanne Verbon

Street Address: 6454 Lunita RD

City: Malibu State: CA Zip Code: 90265

Phone: 310) 924-4321

Email Address: J-VERBON@LEARCAPITAL.COM

Preferred Contact Method: Email Mail

E-mail or text

Fix what is there

WRITTEN COMMENTS: Comments may also be mailed to: Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 Main Street, MS 16, Los Angeles, CA 90012 or emailed to karl.price@dot.ca.gov.



PH-1-1

Trancas Creek Bridge Replacement Project

Thursday, May 25, 2017

Malibu West Beach Club

Comment Sheet

PH-2

Thank you for interest in the Trancas Creek Bridge Replacement Project. Please complete the contact information below and indicate the best way to reach you if would like to receive updates on the project.

Contact Information

Name: Rosemary Sampson

Street Address: 31801 COTTONTAIL LANE

City: MALIBU State: CA Zip Code: 90265

Phone: 310 457-2601

Email Address: maliburoam@yahoo.com

Preferred Contact Method: Email Mail

1) Replacing bridge with a bridge of the same length but widening it 9 feet.

PH-2-1

2) The intersection of the road at TRANCAS CANYON / BROADBEACH ROAD and P.C.H. Where is the bridge going to be in respect to this intersection?

PH-2-2

3) Right hand turn lane at the intersection for safety purposes

PH-2-3

WRITTEN COMMENTS: Comments may also be mailed to: Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 Main Street, MS 16, Los Angeles, CA 90012 or emailed to karl.price@dot.ca.gov.



Trancas Creek Bridge Replacement Project

PH-3

Thursday, May 25, 2017

Malibu West Beach Club

Comment Sheet

Thank you for interest in the Trancas Creek Bridge Replacement Project. Please complete the contact information below and indicate the best way to reach you if would like to receive updates on the project.

Contact Information

Name: Rosemary Simpson

Street Address: 31801 COTTONTAIL LANE

City: MALIBU State: CA Zip Code: 90265

Phone: 310 457 2601

Email Address: maliburoam@yahoo.com

Preferred Contact Method: Email Mail

Is the requirement to replace the bridge rather than keep the current configuration but replacing the pilings due to current safety and construction regulations?

PH-3-1

WRITTEN COMMENTS: Comments may also be mailed to: Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 Main Street, MS 16, Los Angeles, CA 90012 or emailed to karl.price@dot.ca.gov.



Trancas Creek Bridge Replacement Project

Thursday, May 25, 2017

Malibu West Beach Club

Comment Sheet

PH-4

Thank you for interest in the Trancas Creek Bridge Replacement Project. Please complete the contact information below and indicate the best way to reach you if would like to receive updates on the project.

Contact Information

Name: JOSE RUBALCABA

Street Address: 23825 STUART RANCH RD.

City: MALIBU State: CA Zip Code: 90065

Phone: 310-456-2489 x 357

Email Address: ~~jorgerubalca~~ jrubicava@malibucity.org

Preferred Contact Method: Email Mail

Multiple horizontal lines for writing comments.

PH-4-1

WRITTEN COMMENTS: Comments may also be mailed to: Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 Main Street, MS 16, Los Angeles, CA 90012 or emailed to karl.price@dot.ca.gov.



Trancas Creek Bridge Replacement Project

Thursday, May 25, 2017

Malibu West Beach Club

Comment Sheet *RK*

PH-5

Thank you for interest in the Trancas Creek Bridge Replacement Project. Please complete the contact information below and indicate the best way to reach you if would like to receive updates on the project.

Contact Information

Name: MARION HASTINGS

Street Address: 6224A TAPIA DRIVE

City: MALIBU State: CA Zip Code: 90265

Phone: _____

Email Address: _____

Preferred Contact Method: Email Mail

X - IF NO CHOICE FOR REPAIR, THEN SHORT BRIDGE REPLACEMENT IS BETTER THAN LONG BRIDGE

PH-5-1

X SAFETY ISSUE *X*

1 WE NEED A "RIGHT HAND TURN LANE" INTO TRANCAS SHOPPING CENTER - VERY DANGEROUS

PH-5-2

HAVING CARS TRAVELLING 50 -> 55 MPH ON PCH, THEN SUDDENLY HITTING A DEAD END TO

TURN RIGHT - CARS FOLLOWING ASSUME THAT THE (R) HAND TURN WILL BE AT THE

PH-5-2

STOP LIGHT @ TRANCAS & PCH - THEY ARE UNAWARE THAT ONE CAN TURN (R) AT 2 UNMARKED

2 AREAS PRIOR TO THE MAIN INTERSECTION - I DO NOT CARE FOR #3 - (OVERKILL!) OR #2

PH-5-3

X WOULD PREFER REPAIR OF EXISTING BRIDGE *X*

WRITTEN COMMENTS: Comments may also be mailed to: Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 Main Street, MS 16, Los Angeles, CA 90012 or emailed to karl.price@dot.ca.gov.

- CONSTRUCTION ON A MAJOR HIGHWAY FOR 2 YEARS ??

- UNREALISTIC!



PH-5-4

Trancas Creek Bridge Replacement Project

Thursday, May 25, 2017

Malibu West Beach Club

Comment Sheet *RK*

06/03/2017

PH-6

Thank you for interest in the Trancas Creek Bridge Replacement Project. Please complete the contact information below and indicate the best way to reach you if would like to receive updates on the project.

Contact Information

Name: Rosemary Sampson

Street Address: 31801 COTTONTAIL LANE

City: MALIBU State: CA Zip Code: 90263

Phone: 310 457 2601

Email Address: malibu room @ yahoo.com

Preferred Contact Method: Email Mail

AFTER REVIEWING the Summary EPR, I AM IN FAVOR OF OPTION 3 "BRIDGE REPLACEMENT-LONG". EVEN THOUGH THE BRIDGE IS MORE EXPENSIVE THAN OPTION 2 IT SERVES SEVERAL PURPOSES THAT OPTION 2 DOES NOT SERVE JUSTIFYING THE ADDITIONAL FUNDS - THE HOME OWNER AND THE TENANT CAN REMAIN, THE HEIGHT OF THE BRIDGE IS MORE IN KEEPING WITH THE CORRGNT BRIDGE HEIGHT, AND THERE IS THE OPPORTUNITY TO RESTORE HABITAT THAT WOULD OTHERWISE BE UNRESTORED.

PH-6-1

PH-6-2

TRAFFIC IS A CONCERN FOR US. LIVING OFF BROAD BEACH ROAD I AM CONCERNED THAT IF THE BRIDGE STARTS BACKING UP TRAFFIC PAST THE SECOND (WESTERN) ENTRANCE TO BROAD BEACH. THE DRIVERS WILL TAKE BROAD BEACH AS AN ALTERNATE ROUTE HEADING EAST BOUND TO JUMP PAST THOSE WAITING THEIR TURN TO GET PAST THE BOTTLENECK.

PH-6-3

WHEN THE LIGHT CHANGES AT TRANCAS/BROAD BEACH AND PCH THEY WILL BE AHEAD OF THE 1/2 MILES OF CARS GOING EAST BOUND ON PCH (THE SECTION PARALLEL

WRITTEN COMMENTS: Comments may also be mailed to: Ron Kosinski, Deputy District Director, California Department of Transportation, Division of Environmental Planning, 100 Main Street, MS 16, Los Angeles, CA 90012 or emailed to karl.price@dot.ca.gov.

BROAD BEACH), THIS IS A RESIDENTIAL STREET (SPEED LIMIT 25 MPH) THAT IS NARROW AND ALREADY BUSY WITH BEACH GOERS (5 ENTRANCES ON BB) AND CONSTRUCTION WORKERS, GARDENERS, AND TOURISTS, RESIDENCE, ETC. OPTION 1 IS NOT AN OPTION. THE BRIDGE NEEDS TO BE REPLACED. (COVER) ↓

PH-6-3



PH-6

I DID NOTE THAT YOUR DOCUMENT INDICATED THAT THERE WAS AN ALTERNATE ROUTE THAT COULD BE USED THREE MILES AWAY. WHERE MIGHT THAT BE? AS FAR AS I KNOW THERE ARE NO ALTERNATE ROUTES IN EITHER DIRECTION OF THE BRIDGE THAT WOULD NOT REQUIRE A LONG DISTANCE DRIVE TO GET TO THE OTHER SIDE OF THE BRIDGE SHOULD THAT BECOME NECESSARY.

PH-6-4

PH-6-4

1 CALIFORNIA DEPARTMENT OF TRANSPORTATION
2 PUBLIC HEARING ON
3 THE TRANCAS CREEK BRIDGE REPLACEMENT PROJECT
4

5
6
7 REPORTER'S TRANSCRIPT OF PROCEEDINGS
8 THURSDAY, MAY 25, 2017
9 6:33 P.M.

10 MALIBU WEST BEACH CLUB
11 30756 PACIFIC COAST HIGHWAY
12 MALIBU, CALIFORNIA 90265

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24 PUBLIC HEARING
25

26 REPORTER: IZUMI KONO, CSR NO. 14156

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APPEARANCES :

RON KOSINSKI , CALTRANS DEPUTY DIRECTOR
KARL PRICE , CALTRANS SENIOR ENVIRONMENTAL
PLANNER

PETER JONES , CALTRANS PUBLIC INFORMATION
OFFICER

PRESENTERS :

SHAHRIAR YADEGARI , CALTRANS ROJECT MANAGER
CHRISTINE LAN , CALTRANS ENVIRONMENTAL
PLANNER

FACILITATORS :

CHESTER BRITT
RAUL VELAZQUEZ

3
4 MR. KOSINSKI: Hello. If I can have your
5 attention, please.

6 My name is Ron Kosinski. I'm the deputy for
7 environmental planning with Caltrans, and I would like to
8 welcome you to this facility and this public hearing
9 today. We have a little presentation, a brief
10 presentation, and at the end at that point, we will then
11 go to you for comments and suggestions on how we might
12 improve this project.

13 The end of comment period, I believe, is the
14 5th --

15 What is it? The 5th of June. Yeah. So we
16 encourage you to get your comments in by the 5th of June,
17 and we'll probably reiterate that a couple times during
18 this meeting. My understanding is the City has a
19 separate meeting going on right now dealing with
20 watershed issues, septic tank issues. A lot of people
21 are at that, so it was bad timing or fortuitous timing
22 depending your perspective.

23 So with that, I'm going to hand this over to
24 Chester, and we'll get started. And thank you for your
25 attention.

1 MR. BRITT: Thanks, Ron.

2 Well, I'll start off by just thanking all of you
3 for taking your time out of your busy schedule to be here
4 tonight for the Trancas Creek Bridge Replacement Project.

5 When you came in, you should have had the
6 opportunity to sign in. If you did not sign in, we would
7 ask you to please do that so we have a record of everyone
8 in attendance. There's also a number of handouts that I
9 just want to draw your attention to and make sure you
10 have a set of those.

11 There's -- first, the speaker card. We already
12 have a few that have filled that out that would like to
13 speak tonight. If you would like to speak, we would
14 request that you fill that out, so we have a record, and
15 we will be calling you up in the order that we receive
16 them.

17 There's also an agenda -- pretty straightforward
18 agenda tonight. We had the opportunity for the first 30
19 minutes to look at the boards and talk to some of the
20 environmental representatives from Caltrans tonight. And
21 now we're going to be doing a short presentation. We'll
22 be taking some comments, and then we'll go back into an
23 open house session where you can then go look at the
24 boards again and ask some more questions.

25 We also have a fact sheet which looks like this.

1 We want to make sure you have a copy of that. It gives
2 information about the project in general, the process
3 we're going through, and how you can stay connected
4 through a variety of online engagement opportunities.

5 And then finally a comment sheet. So if you are
6 shy and you don't want to speak in public through the
7 microphone, we would ask that you take an opportunity to
8 fill this out and leave it behind tonight before you
9 leave, or you can take it home and think more about it,
10 fill it out at home, and send it in. It just needs to be
11 postmarked, as Ron mentioned, by the date of the end of
12 the comment period.

13 So with that, let me get us started here. I
14 just went through the agenda. Tonight, the purpose of
15 the meeting that we're doing tonight is really to review
16 the draft findings of the environmental study and it
17 includes any impacts and proposed mitigation measures
18 that were found through the analysis.

19 We're also going to receive and document all
20 your public comments. We have a court reporter here
21 tonight that will be recording comments. I should
22 mention also that if you would like to leave a comment in
23 person and not in front of the whole group after the
24 meeting, she'll be here for the period of the open house
25 where you can go sit next to her and have your comment

1 recorded instead of having to write it down yourself.

2 But we are going to be receiving comments
3 related to the Draft Initial Study and Environmental
4 Assessment report. The draft document is back there for
5 your review if you would like to see it in person, you
6 can do that. And there's some representatives from
7 Caltrans that could walk you through any sections that
8 you would want to look at in particular. We'll also
9 outline the decision-making process for selecting a
10 preferred alternative and the next steps overall in the
11 project development process.

12 Your input is important. That's why we're here.
13 In addition to giving you information, we want to garner
14 your input on the draft document. So after the
15 presentation, we'll be inviting members to provide oral
16 comments on any environmental topics that you see fit to
17 speak -- I mentioned already if you'd like to fill out
18 that registration speaker card, we'll be calling you to
19 the microphone. We don't have a lot of people here
20 tonight, so we won't be real rigid on the three-minute
21 rule, but if you could try to keep your comments to
22 around three minutes, that would help us and then allow
23 other people to speak who would like to do that.

24 So before we move forward, I just want to
25 introduce -- there are two people from Caltrans that will

1 be speaking tonight: Shahriar Yadegari -- he is the
2 project manager for Caltrans, and he'll be coming up and
3 explaining the findings, as well as Christine Lan, and
4 she's the environmental planner for Caltrans.

5 So, Shahriar, if you could come forward, that
6 would be great.

7 MR. YADEGARI: I'm not as tall as you, so...

8 I'm going to give you a little history of why
9 we're here -- why we are doing what we are doing.
10 Basically this bridge was built in 1927, and then it was
11 widened in 1938 -- long time ago. This bridge carries an
12 average of 22,100 vehicles every day -- very busy bridge.
13 Very important bridge. This is basically where the east
14 and west connects, and we know how important it is to all
15 your residents.

16 The history of the scour erosion issue started
17 back in 1967, and in 1998 there was no report of problem.
18 We built some riprap and re-grade it, and we thought that
19 was it. Then in 2009, the bridge was evaluated again,
20 and that's when we found that we have a scour problem.

21 In 2011, we installed sensors on the bridge so
22 that we can measure the movement and if there is going to
23 be a problem. And these sensors are monitored by us, so
24 that in case that we see that is dangerous, we're going
25 to stop the traffic. We're going to rebuild it right

1 away instantly.

2 But what is the difference between that and what
3 we are doing now? We are trying to do it in such a way
4 that we are not going to obstruct your life -- everyday
5 life as much as possible. If you wait till the bridge
6 fails, then we are going to be instantly closing the
7 bridge while we are going to be building the bridge in
8 stages which I am going to be talking about.

9 Our schedule -- the way that we work is first,
10 we have a notice of initiation of a study, which happened
11 back in December of 2014. And then we had a scoping
12 document that we prepared back in 2016. And then we have
13 the Draft Initial Study, which we released it May 2nd
14 which is about 23 days ago. And now, that's where we
15 are -- public hearing.

16 After public hearing, we're going to be
17 collecting all your inputs, put them together, and then
18 we are going to complete the draft environmental document
19 and the project report. We are hoping that we are going
20 to finish the project report by June 29.

21 The location -- we all know where it is, of
22 course. We are next to it, but on the map that's where
23 the location is. And as I said, the purpose of this
24 project is to maintain a safe and reliable
25 infrastructure. We are trying to preserve the space. We

1 are going to rebuild it. We are going to replace it with
2 a better bridge.

3 This new bridge is going to have no issues that
4 the other bridge has as I'm going to explain. We are
5 going to have a Class II bike lane, and we are going to
6 have better shoulder because we are going to be widening
7 it. The scour issues is the history, as I talked about,
8 and we know that there was a nonstandard shoulder.

9 As you know in Caltrans we have standards for
10 everything. And these standards help us drive easier.
11 So these nonstandard shoulders are not our standards, so
12 we are going to be taking care of that while we are
13 replacing the bridge. And we have a nonstandard bike
14 lane, and that's what we are going to take care of. The
15 bridge railing does not meet the requirement. It does
16 not meet the height; it does not meet the correct impact
17 issue. So we are going to be taking care of all of that
18 so that we have a brand new bridge -- beautiful bridge.

19 These are the scour problems as you can see.
20 And I think this particular picture will show best where
21 the deterioration is. This is the column right in the
22 middle, and if you go inside you can see them. You can
23 even chip some of these cements out. So they are not in
24 good shape, but they are still standing. They are not
25 dangerous at the moment. And if you look closely here,

1 you can see the crack. That's not what we want the
2 bridge to look like.

3 There are three alternatives that we have been
4 considering in order to do this bridge. One is "no
5 build." In other words, no improvement -- and we sit and
6 wait and see what happens. And one day it's going to
7 collapse. That's not a good alternative.

8 Second alternative is to replace the bridge with
9 the exact same length, just a little longer -- about 20
10 feet. But we are going to build it nine feet wider so
11 that we can accommodate the bike lane and the shoulder
12 that we were talking about. And that's the structural
13 section. However, in order to build it, because of the
14 environmental changes and the requirements by the County
15 and the Coastal Commission and all the other people
16 involved, other stakeholders, we need to raise the
17 profile of the bridge by two and a half feet.

18 What does that mean? Which means the approach
19 to the bridge is going to be raised two and a half feet,
20 so we are going to have retaining walls which you don't
21 see at the moment. That's the bridge. This is not going
22 to be exactly the way it is. It's just that we wanted to
23 show you how we are going to build it. Of course this
24 does not look anything like the lagoon here, but this is
25 what we tried to at least show you what we were trying to

1 do.

2 There is another option that we have been
3 looking at. We know that the conservancy wants to
4 restore the lagoon, so if we go with the short bridge, we
5 still have the choice of building the bridge versatile.
6 What do I mean by "versatile" is the other side of the
7 bridge which is on the south portion -- or the east
8 portion, is going to be versatile so that we can add to
9 it later. So if you build a pier in such a way that if
10 we need to extend it, we can extend it later if there is
11 a need.

12 The third alternative is going to be the longer
13 bridge. So the longer bridge is going to be 140 feet
14 longer and of course nine feet wider. This longer bridge
15 will accommodate the waves in order to restore the lagoon
16 also and restore the fish habitat which most of us wants
17 to see. In order to build --

18 Oh. If we are going to be building the longer
19 bridge, then we do not have to raise the profile. And
20 that's what it's going to look like -- almost. And I
21 think Christine can talk about the rest of the process.

22 MS. LAN: Hi, everyone. My name is Christine,
23 and I'm the environmental planner on this project. I'll
24 be going through the environmental process with you guys
25 tonight.

1 So the environmental process at Caltrans starts
2 with conducting studies, and we conduct a variety of
3 studies including hazardous waste, biology, cultural, and
4 many more. At the same time when we initiate the
5 studies, we also try to reach out to the stakeholders so
6 that you guys are aware of the project ahead of time.

7 So we had a scoping meeting last year at this
8 exact same place to inform the public about this project.
9 After we have conducted the studies, then we take all the
10 conclusions and then we write up the environmental
11 draft -- the Draft Environmental Document. And we'll
12 be -- and we have been circulating that since May 2nd.
13 It's available on the web, and you guys can check it out,
14 after which we'll have a public hearing, which is today.

15 And we'll take all your guys' comments where --
16 and we will take them into consideration when we're
17 picking a preferred alternative. And when we have picked
18 the alternative and prepared the final document, we will
19 make the design then, and then we will proceed towards
20 construction.

21 The environmental document type for this project
22 is going to be initial study under CEQA and anticipated
23 finding of mitigated negative declaration. And for NEPA
24 it's an environmental assessment with anticipated finding
25 of no significant impacts. And just a little bit of

1 brief background behind CEQA and NEPA. CEQA is the
2 environmental protection regulation for the state, and
3 NEPA is the environmental protection regulation for the
4 federal laws. Under these two regulations, Caltrans is
5 the lead agency, and this means we will produce the
6 environmental documents for this project in-house.

7 Some of the issues that we have studied are
8 listed on the slide right now. And the four biggest
9 issues for this project are biology, Section 4(f),
10 right-of-way, and hydrology. So for biology, as you can
11 see, right next to us there's some very sensitive
12 habitats out there, and we would like to do everything
13 that we can to build a responsible project
14 environmentally. So we studied the wetlands, the
15 sensitive species which includes the western snowy plover
16 and also the the remaining lagoon that's still existing.

17 For Section 4(f), it is a regulation that
18 protects the public recreational resources locally. So
19 for our project, it's right next to Zuma Beach which is a
20 public recreational resource. And we have to acquire
21 some right-of-way both from Zuma Beach and from the
22 private property inland of the bridge. And those
23 right-of-way, to be acquired, are to make sure that we
24 build a bridge that has an abutment that is protected
25 from erosion and scour.

1 And hydrology, as Shahriar has briefly
2 mentioned -- it's the reason why we have to raise the
3 shore bridge by 2.5 feet. It's to accommodate for the
4 100-year flood, and in case of a 100-year flood, Caltrans
5 wants to make sure that we will be able to support
6 vehicles traveling still, and for the short bridge, that
7 requires us to raise the profile. For the long bridge,
8 we have enough clearance under the bridge to let the flow
9 water flow through. So that's why we have to raise the
10 short bridge.

11 And that's it for my presentation. Thank you
12 for your time.

Comments Start Here

13 MR. BRITT: Great. So now we're at the point
14 where we're going to take public comments. I have two
15 speakers that have filled it out and already submitted
16 it, so if you do want to speak, I would again ask that
17 you fill out your speaker card, and you can walk it up
18 here and hand it to me.

19 The oral and written comments will be accepted
20 at this meeting. As I mentioned, you can also fill out a
21 comment card and drop it off before you leave or fill it
22 out later and submit it. You can also speak to the court
23 reporter immediately following this session if you don't
24 want to do it in public and you're a little shy, you can
25 do that. If you want to mail comments, we would ask that

1 you mail them to this location right here which is on the
2 materials as well. You could e-mail comments to Karl
3 Price.

4 Karl is actually here. Karl, raise your hand.
5 So if you want to hand him comments, he's going to be
6 here and available as well. The comments do need to be
7 postmarked by June the 5th. It's a very important date.
8 If you send it later, you'll miss the comment period, so
9 we want to make sure that you get your comments in before
10 that date.

11 And then the comments will be summarized in the
12 final environmental document, and they'll be recorded
13 there as part of the final document.

14 So with that if you can just line up. It's
15 Jorge Rubalcava, and Gregg Hannley, and then Bill
16 Sampson. Raul can turn on the microphone there, so if
17 you want to just come up to the microphone. And when you
18 start your comment, if you would just repeat your name
19 just for the court reporter so she can type it in -- that
20 would be great.

21 MR. RUBALCAVA: Hello, everyone. Just want to
22 say thank you for putting this meeting together,
23 Caltrans.

24 And my name is Jorge Rubalcava. I am from the
25 Public Works Department, City of Malibu, and I just want

1 to say that we briefly reviewed this initial study, and
2 we have the following items that we believe should be
3 addressed and incorporated into the design.

4 First one is a bike lane on the north side of
5 PCH. We understand that there's a bike lane on the south
6 end of PCH which is a Class II, but a bike lane should be
7 incorporated on the north side.

PH-7-1

8 Enough -- enough width for parking and transit
9 on both sides of PCH. A sidewalk for pedestrians on the
10 north side of PCH from Trancas Canyon Road to the bridge
11 that would lead to a pedestrian undercrossing. The
12 undercrossing shall be connected to a sidewalk on the
13 south side of PCH that leads to Zuma Beach similar to the
14 undercrossing at Topanga Canyon and Pacific Coast
15 Highway.

PH-7-2

16 The bridge shall have enough vertical clearance
17 for a 100-year storm event supported by hydrologic and
18 wave up rush analysis. This analysis shall also be in
19 conformance with a new and revised FEMA base flood
20 elevations that will be in effect next year.

PH-7-3

21 The bridge's wing walls shall have enough riprap
22 protection on both the northwest and northeast to ensure
23 the structural integrity of the bridge.

PH-7-4

24 And lastly, the installment of a right-turn lane
25 at Trancas Canyon Road and PCH is critically needed. The

PH-7-5

1 average speed of vehicles traveling northbound is between
2 50 to 60 miles per hour, and sudden deceleration for
3 vehicles turning right on Trancas Canyon have been the
4 cause for rear-end collisions at the intersection.

PH-7-5

5 In summary, the bridge shall have -- shall be
6 wide enough on both sides of PCH to accommodate parking,
7 sidewalks, a bike lane, and a right-turn lane. As a
8 matter of law, all modes of travel must be incorporated
9 into the design as referenced in the Complete Streets
10 Policy that was effective 2008. We will also be
11 submitting comments before June 5th.

PH-7-6

12 Thank you.

PH-8

13 MR. BRITT: Thank you. Greg Hannley, and Bill
14 Sampson.

15 MR. HANNLEY: This way or this way?

16 MR. BRITT: However you want.

17 MR. HANNLEY: So I live in the first house next
18 to the bridge, and I got to meet Christine --

19 UNIDENTIFIED SPEAKER: Which side? That side or
20 that side?

21 MR. HANNLEY: No, I'm on this side --

22 UNIDENTIFIED SPEAKER: Okay.

23 MR. HANNLEY: The very first house.

24 And so Christine had come and said that on the
25 short bridge that they would need to -- Caltrans would

PH-8-1

1 need to take that house which -- you know, it wasn't a
2 very good -- good afternoon with the information.

PH-8-1

3 And I understand those things go on, and, you
4 know -- for the good of the public that sometimes
5 those -- those things happen. But I want to make sure
6 they're aware of what the cost of that -- because the
7 long bridge doesn't necessitate the house being taken by
8 Caltrans as far as I understand. So when they're
9 figuring out the cost of this -- and I'm sure California,
10 Caltrans -- and to be real aware of the cost, that they
11 get a good idea of what the cost of that house would be
12 to --

PH-8-2

13 And she had mentioned they would relocate us,
14 which I'm not exactly sure how you would relocate
15 somebody from that particular house to anywhere in the
16 world. It's the best house. Unless the next door
17 neighbor would let me move into his house and everybody
18 just moved down one. Then you could still be the first
19 house on the beach.

PH-8-3

20 But something -- and what I was looking -- and
21 when I had talked to Christine about is they're talking
22 about the lagoon that would get -- they would help build
23 the lagoon or something that they had said. Well, during
24 the drought, there was no lagoon, and now over the last
25 three months -- and I sit a lot -- I spend a lot of time

1 on the porch and down around the lagoon area. The lagoon
2 is back, and it's not a temporary situation. There's
3 fish in the lagoon that didn't come from the ocean, so I
4 think there are a good chance that they are the same kind
5 of fish -- like, steelhead fish are back in the lagoon.
6 There's multiple -- and I'm really aware of the
7 environment and the animals that I see, and there's all
8 kinds of new birds.

PH-8-4

9 There's all kinds of new animals, and there
10 is -- and I have the feeling that if they took -- if they
11 did the environmental study six months ago or a year ago,
12 the results of that study would be completely different
13 than what they are now, and certainly six months from now
14 because the lagoon -- I was surprised -- I couldn't
15 understand it -- always the ocean would come in and then
16 go away, but this time it seems like it's a permanent
17 lagoon now. And you see -- and I know that ducks aren't
18 endangered, but there's, like, whole new families of
19 ducks. There's these weird birds building nests.
20 There's new animals that are coming into the house that
21 have now become part of this lagoon.

PH-8-5

22 And I just think that -- that probably the
23 environmental study needs to be done again and not -- I
24 mean, when it was just a dry thing and a homeless camp
25 under there, they might not have had as much impact on

Page 19

1 what is there right now that doesn't seem like it's going
2 to go anywhere. I was looking at it today -- I mean, her
3 coming over made me take a good look at it again, and
4 it's just interesting -- the new plant life that's
5 come -- it's like this lagoon is alive there. So I have
6 a feeling that there's probably some type of endangered
7 animals that are in that lagoon that would -- and it
8 should be addressed in the environmental impact and those
9 animals should be -- should be at least considered.

10 If there was going to be a bridge, I'm kind of
11 hoping it's a long bridge because I enjoy living in the
12 property and plan on staying there. And I already knew
13 that there was going to be a bridge. I would vote for
14 the "no build" and fix the old bridge, you know. It
15 seems like in today's engineering, there's got to be some
16 way to take a bridge and shore it up better than it is
17 to -- I can't even imagine the impact of the construction
18 is going to be on our side of town, you know. The --
19 with traffic and things, and if ever there's a day that
20 the bridge is closed, I don't know how to go to work.
21 You'd have to go over Westlake Boulevard to the 101 to
22 come down it would make --

23 UNIDENTIFIED SPEAKER: (Inaudible.)

24 MR. HANNLEY: I like the -- just driving down
25 the street --

PH-8-6

1 UNIDENTIFIED SPEAKER: I'm with you.

2 MR. HANNLEY: Instead of having -- and we've all
3 seen when Kanan Road was a mess. There's -- I think that
4 there's some things that need to be considered that are
5 new and recent over the last probably -- I've noticed the
6 lagoon stay permanent probably in the last three months,
7 and it's -- it's alive again, so it should have some
8 consideration.

PH-8-7

9 MR. BRITT: Thank you so much.

10 Bill Sampson, followed by Stacy -- it looks like
11 Clunies.

PH-9

12 MR. SAMPSON: Okay. I'm not sure how Columbus
13 got here without that stuff, but it's just duct tape.

14 Okay. Can you hear me, ma'am?

15 All right. I would echo the City of Malibu's
16 concern about the bike lane. If the plan is to have a
17 bike lane only on one side, that's insane. I am both a
18 motorist and infrequent bicyclist. I guarantee you
19 motorists do not look to their right for bicyclists
20 because the bicyclists on their right is going the wrong
21 way.

22 Well, I know bicyclists forget that they're
23 vehicles, but they are so described in the California
24 Vehicle Code. They're entitled to the same rights and
25 privileges and have the same responsibilities. That

Page 21

1 means that they also are supposed to text and talk on the
2 phone and apply their makeup all at once while riding
3 their bikes like we do in our cars.

4 But my real concern is traffic, and I can't tell
5 from the design. I am now a student at Santa Monica
6 College majoring in volleyball and badminton and swimming
7 really badly, but I go down there a couple times a week,
8 and my wife, Rosemary, goes with me. And we notice when
9 we get in our car at places like Sunset and other places
10 where --

11 Oh. How about right in front of Ralphs where
12 there are three lanes for a couple hundred feet and then
13 two lanes. I love the drags -- okay -- I took my wife to
14 the Winternationals on Valentine's Day a couple years
15 ago. I love speed, but having a drag race lane -- is
16 where you go two to three to two -- is absolute insanity.
17 You're inviting collisions. I like collisions, too, but
18 I like to see them on NASCAR races. I don't want to see
19 them where I'm out here a motorist or bicyclist or a
20 pedestrian -- probably a pedestrian more than anything.
21 So safety for us there.

22 I don't know if you've -- if you make it wide
23 enough to make it three lanes there, you're inviting drag
24 racing, which has a great place, you know, if you go to
25 the drags or go out to Pomona. Those things can do 300

PH-9-1

1 miles an hour in a thousand feet. You will feel that
2 kind of acceleration, but it's no good out here. And I
3 hope you'll avoid it.

4 Are those really steelhead? 'Cause there's --
5 what's that guy's name, he wrote a book about -- a real
6 old-time --

7 UNIDENTIFIED SPEAKER: (Inaudible.)

8 MR. SAMPSON: Yeah. Okay. I think he claims
9 he's caught steelhead in Trancas Creek. Okay. And
10 'cause he -- I remember talking to him. Yeah.

11 So this gentleman is doubtless correct --
12 Greg -- that there are now -- steelhead are ocean-going
13 fish, so they got -- I mean, they're trout that went out
14 in the ocean. But anyway if they are there, it would be
15 nice to see them protected.

16 I'm only being somewhat serious -- I mean, I
17 don't even know why but there's a one-lane bridge
18 preservation society. The town in a lot of ways is
19 protected from hotels and all kinds of other havoc by
20 having the one-lane bridge -- literally one lane -- not
21 one-each-way. A one-lane bridge.

22 They can't have any hotels, they can't have all
23 that -- if you have to do this work, would you please --
24 and you have to shut it down, shut it down between
25 Memorial Day and Labor Day.

PH-9-2

1 Thank you.

2 MR. BRITT: Thank you. Stacy Clunies-Ross
3 and -- and that's the last speaker card I have, so if
4 anyone else would like to speak, just wave your hand, and
5 Raul will pick it up.

6 MS. CLUNIES-ROSS: Hi. I'm Stacy Clunies-Ross.
7 Mr. Hannley pretty much summed up everything that I feel
8 about it. I'm the owner at 30708 PCH.

9 I had a couple of questions, because I didn't
10 hear an alternative. I heard an alternative about just
11 leaving it the way that it is and waiting for it to
12 collapse. I didn't hear an alternative about just fixing
13 the existing structure, so maybe I'm wrong that I didn't
14 hear that. Maybe I missed that about just trying to
15 shore up what's already there without tearing a bridge
16 down and doing alternative 2 or alternative 3.

PH-10-1

17 My other question as far as acquiring our
18 property because of what you're going to do, I don't know
19 if that was considered during alternative 2 and
20 alternative 3? Or just alternative 3?

21 Just 2. So if it's alternative 3, that doesn't
22 require acquiring that property? Or is it both
23 alternatives that require --

24 MR. YADEGARI: We cannot tell you right now.

25 MS. CLUNIES-ROSS: You cannot tell.

1 Right. So that's my issue because as much as --
2 my tenant loves there. He has a lease option to buy that
3 property, and he has had that for a very long time, and
4 so we would like to keep that as is possible. He doesn't
5 want to move; we don't want to lose our property. We've
6 owned it for a very long time. We love it. It is a very
7 special place. That place of any of these places on the
8 beach, that one is the most special.

9 As he said, if it does get torn down -- you
10 know, it would be nice to move everybody down one because it
11 is a special place.

12 So if I could hear some sort of alternative that
13 requires just fixing what's there somehow and shoring up
14 what's there without having to do, you know -- I see
15 alternative 1 says "no build." That means don't build
16 it, don't touch it, don't do anything about it. So I
17 didn't hear anything about doing something about what's
18 going on with the scour underneath it for now.

19 Thanks.

20 MR. BRITT: Thank you, Stacy.

21 Jennifer Voccola-Brown, I believe.

22 MS. VOCCOLA-BROWN: Hello. I'm Jennifer
23 Voccola-Brown. I'm the Senior Environmental Programs
24 Coordinator for the City of Malibu in the Environmental
25 Sustainability Department.

1 My comments are very brief. I did a quick
2 cursory screen of the document for certain regulations.
3 I was mostly concerned about the area of special
4 biological significance -- which this coastline is a
5 critical coastal area designated by the State.

PH-11-1

6 I know that Caltrans is actually aware that that
7 is a regulation here, because they are also listed as a
8 responsible agency in the state's regulation. So I do
9 just ask that if it does go under construction, that as
10 part of your storm water pollution prevention plan that's
11 developed, you adequately address protecting the area of
12 special biological significance from having any
13 discharges of materials that may alter the natural water
14 quality in that area.

PH-11-2

15 Thank you.

16 MR. BRITT: Thank you.

17 You'd like to speak?

PH-12

18 MR. KLEIN: Yes. My name is Danny Klein, and I
19 used to be the owner of that property we're discussing.
20 Now it belongs to my children.

21 And in hearing the person that lives there talk
22 about the beauty and the serene pleasure, I know if I
23 lived in that house I'd live there another 25 years; all
24 right? That's how important to the owner or the tenant,
25 to him -- and I can sympathize with that.

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1 The other issue I have is is there an
2 alternative that you can repair that to take it out of
3 the danger that you consider it presently in?

PH-12-1

4 You're giving me a no. Why? Are you
5 absolutely -- can you guarantee there is no other
6 alternative? Do you know that? Can you prove it to the
7 people of Malibu that you can't repair that? Somehow
8 that won't make sense to me; all right?

9 The other thing is if you knew anything about
10 the Pacific Coast Highway and this particular area. What
11 is your projected time of construction? Do you know how
12 long it's going to take? How long?

PH-12-2

13 MR. YADEGARI: It's going to take close to about
14 two years.

15 MR. KLEIN: Okay.

16 MR. YADEGARI: It does not mean that we are
17 going to be closing -- we are not --

18 MR. KLEIN: There's going to be a lane.

19 MR. YADEGARI: The stages it is going to take --
20 less than than a year at this moment.

21 MR. KLEIN: Have you done any environmental
22 studies about traffic congestion on this highway
23 especially in the hot months? Do you know what happens
24 between here -- the traffic?

PH-12-3

25 MR. YADEGARI: Yes --

1 MR. KLEIN: Do you know what it would take you
2 just on a trafficky day to travel from Trancas to Kanan
3 Dume Road? And I'm not exaggerating. It could take an
4 hour and a half --

5 UNIDENTIFIED SPEAKER: He's right.

6 MR. KLEIN: Okay?

7 UNIDENTIFIED SPEAKER: He's right.

8 MR. KLEIN: It's no joke --

9 UNIDENTIFIED SPEAKER: He's right.

10 MR. KLEIN: So can you imagine what's going to
11 happen because of this traffic situation?

12 More than anything else, it isn't because you
13 happen to -- when we were talking about using my house
14 and getting rid of it -- okay -- 'cause you know damn
15 well you're going to have to pay for it. It's not a
16 cheap amount of money. I guarantee that. Be aware of
17 it; all right? Very aware. It'll cost you more than the
18 bridge is going to cost you maybe.

19 And it's no joke, because the public -- when it
20 comes to paying the taxes that provides your living to do
21 things like that -- are going to be uptight about it.
22 And I don't know if I'm talking out of school here, but
23 do people understand, you know, what can happen; all
24 right?

25 So it's the traffic, and as far as I'm

1 concerned, if the community really was into it -- the
2 community's not so aware; all right? I happen to know of
3 what you guys are planning. I know you've sent out
4 notices; there's been some articles in the paper. But
5 they're not aware, and when you start telling them about
6 traffic -- all right -- they're going to get very
7 uptight. And that hasn't happened yet.

8 So I'm just -- it's nice to improve that bridge
9 for safety reasons, you know, perfectly understandable.
10 I'm sure the public -- but, again, is there no
11 alternative to shore up those so-called scour problems?
12 Because like I told you earlier when I heard about
13 scouring, I went home and I looked it up; all right? I
14 looked it up -- wanted to know what it was all about.

15 And I found it -- I take a screwdriver and I go.
16 And I'm trying to see -- get to the rebar. Okay? First
17 of all, I couldn't find any place where the cement was so
18 weak -- and I'm talking about up high and up (sic) low --
19 that you guys are telling me about scouring.

20 So what I'm wondering about -- and please do not
21 become offended -- what are you, looking for a job
22 here -- you know what I mean? I'm serious. What are you
23 looking to, you know -- you know?

24 My wife's getting uptight, she's telling me to
25 stop talking because -- but I'm very serious. What are

1 you -- looking for a job to do something? I'm tell you
2 this quite seriously. It pisses me off, what you're
3 doing.

4 Thank you.

5 MR. BRITT: Thank you. Anyone else?

6 MS. COLLINS: I just have a question.

7 Does the public have an opportunity to vote on
8 this, or is this just going to be rammed down our throats
9 regardless?

10 MR. BRITT: Well, this is not a forum for
11 voting, obviously. This is an environmental study where
12 this is a public hearing. That's the process in
13 California for all public infrastructure projects.

14 MS. COLLINS: And then once you've gone through
15 this phase and you decide that you think this is a good
16 idea, does the public -- does the community of Malibu get
17 to vote on whether or not you're going to do this, take
18 this man's home, disrupt our lives for two years? Or
19 we're just kind of, "So it goes"?

20 MR. BRITT: Ron, do you want to speak to that?
21 I mean, there's no voting process in place for any public
22 infrastructure project in California.

23 MS. COLLINS: But it -- to me it sounds --

24 THE REPORTER: I can't hear --

25 MR. BRITT: Yeah, if you could start by stating

1 your name for the record. That way we have --

2 MS. COLLINS: I didn't want to talk up here
3 because the last time I talked up here --

4 MR. BRITT: In the microphone, please.

5 Your name?

6 MS. COLLINS: This is kind of hard for me to
7 talk up here right now 'cause the last time I talked up
8 here was for my father's service, so if I get a little
9 emotional, guys, I'm sorry.

10 Okay --

11 MR. BRITT: Could you just state your name --

12 MS. COLLINS: My name is Kay Collins. I've
13 lived here 30 years.

14 MR. BRITT: Thank you.

15 MS. COLLINS: I remember when Broad Beach was
16 broad. I remember when there were sea shells and sand
17 dollars. I remember how beautiful this place was.

18 My question to you --

19 I had no idea they were going to take your home.
20 Eminent domain sucks. And I said that with an "s."

21 The world today of engineering is amazing; okay?
22 We can fly to the moon, we've got electric cars, we've
23 got buildings and structures out here that I have no idea
24 how they stand. I don't understand, unless it's business
25 contracts that are being bribed or obtained in a strange

Page 31

PH-14

1 way why you cannot support and fix the bridge.

2 It doesn't make sense to me when you look at
3 what we build -- I mean, look around you. I mean, we
4 have huge buildings. We have strange ways in which they
5 make them work, but they do. It doesn't make sense why
6 we have to disrupt our lives, get people out of their
7 homes, and create havoc for the poor -- for everybody.

8 People drive -- PCH is insane. It's -- between
9 now and Memorial Day weekend and the end of summer, we
10 don't make a left-hand turn on the weekends. So if you
11 go anywhere, we go north, because literally it could take
12 an hour and a half just to get to the other side of Zuma.
13 And if there's a fire we're all gone, because it's
14 just -- it's just crazy.

15 There's got to be more research done on how to
16 fix the problem. Bet you it would cost less money. I
17 mean, I thought we didn't have enough money to do things.
18 So I really request that you find another way in which to
19 fix this bridge because I think the way you're going is
20 not beneficial for the community.

21 And one thing I love about Malibu is that we are
22 a small community. We care for each other. We like each
23 other. We want to keep our city the way it is. I did
24 not vote for the City because I didn't want it to be -- a
25 lot of stuff to be jammed into my throat, and we need to

1 keep our beauty the way it is. And I think this bridge,
2 I think taking the man's home -- there's got to be
3 another way.

4 Somebody's contractor is getting money under the
5 table for this. I just -- I just -- I just smell -- it
6 just doesn't look like -- you know? One and one isn't
7 adding up to two, so please do your homework.

8 MR. BRITT: Thank you very much.

9 Anyone else?

10 MS. HAWNER: My name is Stephanie Hawner. I
11 work with the City of Malibu Planning Department, so I
12 wanted to address your concern that you felt that there
13 wouldn't be an opportunity to be heard again, that this
14 process and this application will go to the City for a
15 coastal development permit.

16 So it will be going forward and will be reviewed
17 by all the departments at the City, and it would go for a
18 public hearing before the planning commission. So there
19 will be an opportunity for the residents to be heard.

20 MS. COLLINS: Okay. **END OF COMMENTS**

21 MR. BRITT: Thank you very much for offering
22 that information.

23 And I would just like to offer up as well that,
24 you know, CEQA is a very powerful law that the State of
25 California implemented a long time ago for this exact

1 reason and this exact purpose. A lot of states don't
2 have environmental laws like California, and, you know --
3 I've been doing this for 30 years. I've been to
4 literally thousands of meetings for thousands of
5 projects, and I can tell you that the whole point of
6 having a public hearing is not just to rubber stamp
7 something and get projects done, but it's actually to
8 hear what the public has to say.

9 And so your input -- I think you were the one
10 who mentioned you don't want to alienate anyone, we very
11 much do not feel that way. We're having this meeting for
12 you. We don't live here. You guys live here. We
13 understand that. And as planners and engineers and
14 community relations people, we come out to the public so
15 that we can present projects through the environmental
16 process as the legal requirements are, and you guys have
17 the opportunity to give us input.

18 And the decision-makers look at that input. I
19 mean, the input that's reported by our court reporter
20 will be in the environmental document as part of the
21 formal record. And the decision-makers, whether it be
22 the City or Caltrans or whatever agency we're talking
23 about, they very much do consider the input that they
24 receive through the comments. And I've seen many, many
25 projects that are revised, improved, stopped, whatever

1 the right course of action for that particular project
2 is.

3 So I don't want anyone to come tonight and feel
4 like you wasted your time. I think this is a very
5 valuable process that we go through, and we're lucky to
6 live in a state that offers us all the opportunity to
7 come and speak in a microphone and be heard and recorded
8 as part of the environmental process.

9 UNIDENTIFIED SPEAKER: Thank you.

10 So thank you very much.

11 So with that, then I want to thank you guys,
12 again, for offering to us your special place in the
13 world. I've never been to a meeting where I saw waves
14 out the window of a meeting. So this is my first, so
15 this was very memorable.

16 And we'll be here for another, I guess, half an
17 hour or so if you guys need us to be here that long to
18 look at the boards. As I mentioned, you can go up to the
19 court reporter and give a comment if you would like to do
20 that.

21 And with that, I want to thank you for coming.

22 (Whereupon, at 7:20 p.m, the public
23 hearing was adjourned.)

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C E R T I F I C A T I O N

I, IZUMI KONO, certify that the foregoing transcript is a true and accurate record of the proceedings.

IZUMI KONO, CSR NO. 14156

Date: June 13, 2017

J.5.1 Joanne Verbon Comment Card (PH-1)

Response to Comment PH-1-1

The 90-year old bridge, designed for a 50-year life span, has been retrofitted and repaired many times in the past and can no longer be repaired with enough scour mitigation to ensure structural stability. Bridge inspection studies show the current Trancas Creek Bridge structure can settle in a 10 year storm event due to scouring at the support structure. The existing bridge also has vertical cracks throughout the bridge structure.

J.5.2 Rosemary Sampson #1 Comment Card (PH-2)

Response to Comment PH-2-1

The Long Bridge Alternative has been selected as the Preferred Alternative, in part, due to its better hydrologic characteristics, potential long-term benefits to the creek and lagoon, potential undercrossing opportunities, and general support from the public and resource agencies.

Response to Comment PH-2-2

The bridge is southeast of the Trancas Canyon Road/Broad Beach Road and PCH intersection.

Response to Comment PH-2-3

The right turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

J.5.3 Rosemary Sampson #2 Comment Card (PH-3)

Response to Comment PH-3-1

The 90-year old bridge, designed for a 50-year life span, has been retrofitted and repaired many times in the past and can no longer be repaired with enough scour mitigation to ensure structural stability. Bridge inspection studies show the current Trancas Creek Bridge structure can settle in a 10 year storm event due to scouring at the support structure. The existing bridge also has vertical cracks throughout the bridge structure.

J.5.4 Jorge Rubalcava (PH-4)

Response to Comment PH-4-1

N/A. No comment was submitted.

J.5.5 Marion Hastings (PH-5)

Response to Comment PH-5-1

Comment Noted. The Preferred Alternative was chosen for Alternative 3. For the reasoning behind choosing this alternative please see the section “Identifying a Preferred Alternative” within the Final Environmental Document in Chapter 1- Proposed Project.

Response to Comment PH-5-2

The right turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

Response to Comment PH-5-3

The 90-year old bridge, designed for a 50-year life span, has been retrofitted and repaired many times in the past and can no longer be repaired with enough scour mitigation to ensure structural stability. Bridge inspection studies show the current Trancas Creek Bridge structure can settle in a 10 year storm event due to scouring at the support structure. The existing bridge also has vertical cracks throughout the bridge structure.

Response to Comment PH-5-4

Construction work is estimated to be 2 years but the highway will stay accessible to the public for the entirety of the construction period. Traffic control will be implemented to ensure smooth traffic flow.

J.5.6 Rosemary Sampson #3 Comment Card (PH-6)

Response to Comment PH-6-1

The selected Preferred Alternative is Alternative 3. Thank you for your review.

Response to Comment PH-6-2

See comment response PH-6-1.

Response to Comment PH-6-3

Traffic control will be implemented to ensure smooth traffic flow and emergency vehicle access. PCH is expected to stay accessible through the entire duration of the construction period.

J.5.7 Jorge Rubalcava: Oral (PH-7)

Response to Comment PH-7-1

An additional bike lane on the northbound side will require additional right of way acquisitions which will impact the adjacent private properties, cost, and current available parking on PCH. In addition to the existing bike lane we currently have we will have an 8 feet shoulder to allow for safer multimodal transportation (pedestrians and bikers). The shoulder with sufficient width will make it safer for pedestrians and bikers traveling on PCH.

Response to Comment PH-7-2

Parking on the shoulder will be retained for the new design. However, due to utility placement we would need additional right of way and incur additional impacts to the private properties in order to accommodate for transits and pedestrian sidewalks. With the selected Preferred Alternative, the new bridge structure will be able to accommodate for an undercrossing during dry seasons.

Response to Comment PH-7-3

The selected Preferred Alternative will be able to support water flow better than Alternative 2. Caltrans' studies took into account FEMA's 100-year flood event and LA County's 50-year bulk and burned event. Both of these scenarios were then modeled with hypothetical sea level rise scenario during a 30-40 year average high tide data provided by NOAA.

Response to Comment PH-7-4

Caltrans is providing Rip-Rap scour protection for all abutments are within the design plans. In addition, abutments will be built on pile foundations which will provide enough depth to avoid scour damage.

Response to Comment PH-7-5

The right turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the

right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

Response to Comment PH-7-6

Parking on the shoulder will be retained for the new design. However, additional right of way will be needed from the private properties in order to accommodate for pedestrian sidewalks. With the selected Preferred Alternative, the new bridge structure will be able to accommodate for a pedestrian undercrossing during dry seasons.

The right turn lane pocket is not feasible for the current project because additional right of way will be needed from the Trancas Market which will result in additional costs. In addition, the right turn lane will require the closures of both of the existing entry way to the Trancas Market on PCH to accommodate for the required acceleration and deceleration distance. Lastly, only one accident is recorded for the right turn at the intersection of PCH and Trancas Canyon Road. The widening of the roadway will also remove existing parking spaces to the side of the roadway.

J.5.8 Greg Hannley: Oral (PH-8)

Response to Comment PH-8-1

Notice for the potential relocation of the residential home 50 feet northwest of the bridge was delivered to the residents on May 23rd, 2017. The situation with relocation was then explained to the homeowner and related project information were delivered. The homeowners were also encouraged to attend the public hearing on May 27th, 2017.

Response to Comment PH-8-2

The Preferred Alternative has been selected and it will not require the taking of the residential home.

Response to Comment PH-8-3

The Preferred Alternative has been selected and it will not require the taking of the residential home. However, the Preferred Alternative will require temporary relocation of the residence. Caltrans will work with the residents to ensure the smooth transition of the relocation process. All relocation procedures will be carried out according to Caltrans' Relocation Assistance Program and the Federal Uniform Act.

Response to Comment PH-8-4

Caltrans have completed the NEPA & CEQA requirements for protected / listed Steelhead fish. Currently there are no Steelhead in the lagoon or creek due to existing barriers to fish passage upstream. The RCD-SMM staff have performed recent surveys (seining) of the creek and found only mosquito fish. The temporarily expanded lagoon from the heavy rains of 2017 provide additional foraging habitat for wetland birds (egrets, herons, etc.). This is a natural ebb and flow of tidal and wetland habitats as they respond to natural changes in the rainfall and seasonal changes.

Response to Comment PH-8-5

Projects have a long timeline. The natural environment is a dynamic environment and changes constantly. It is difficult to respond to the continual changes of the habitats. Typically, studies have a shelf life of 2 years. If a project isn't started within that time frame and the resource agencies request an additional study/surveys may be required. It is also standard for pre-construction biological surveys to be performed to check for current bird and wildlife conditions, and to take the appropriate avoidance and mitigation measures to protect necessary listed or protected species.

Response to Comment PH-8-6

The selected Preferred Alternative is the Long Bridge Alternative. Thank you for your comment.

The existing bridge that was built for a 50-year span and is already 90-years old. It is now subject to scour under a 10-year storm event. There is not much left to be done with intermediate fixes capable of resolving the scour and structural issues that the existing bridge faces.

Response to Comment PH-8-7

This shows that the lagoon is a viable wetland. Like most coastal wetlands, it changes with the natural rainfalls, and storms. Caltrans have been studying the lagoon for over 2 years and monitoring the conditions. We hope that the RCD-SMM will be able to complete their plans to restore the "Historic Trancas Lagoon," and will return to the lagoon to its former functioning wetland; teaming with wildlife, and protecting the coastline. This is also partially why the selected Preferred Alternative is the Long Bridge alternative.

J.5.9 Bill Sampson: Oral (PH-9)

Response to Comment PH-9-1

Caltrans has strict safety standard specifications that all transportation projects must follow. The same strict safety standards will apply to this project as well.

Response to Comment PH-9-2

Steelhead are protected species under both state and federal Endangered Species Act. Currently, the bridge is not a barrier to fish passage. The barrier(s) are the flood control channels. The chosen Preferred Alternative - Long Bridge Replacement would help to facilitate a lagoon restoration which would simultaneously work to provide additional habitats for steelhead.

J.5.10 Stacy Clunies-Ross: Oral (PH-10)

Response to Comment PH-10-1

The 90-year old bridge, designed for a 50-year life span, has been retrofitted and repaired many times in the past and can no longer be repaired with enough scour mitigation to ensure structural stability. Bridge inspection studies show the current Trancas Creek Bridge structure can settle in a 10 year storm event due to scouring at the support structure. The existing bridge also has vertical cracks throughout the bridge structure.

Response to Comment PH-10-2

The Preferred Alternative has been selected and it will not require the taking of the residential home. However, the Preferred Alternative will require temporary relocation of the residents. All relocation procedures will be carried out according to Caltrans' Relocation Assistance Program and the Federal Uniform Act.

J.5.11 Jennifer Voccola-Brown: Oral (PH-11)

Response to Comment PH-11-1

The only species that is listed as a protected species for the coastal zone is the Western Snowy Plover. We performed our required Section 7 ESA consultation with the USFWS for the listed species. We will be performing numerous avoidance and minimization measures to avoid any impacts to the listed species.

Response to Comment PH-11-2

Caltrans is required to monitor the water quality per our permits from the Ca. Regional Water Quality Control Board, as well as a condition of our Stormwater Pollution and Prevention Plan. Through protective measures outlined by our permits and plans, existing habitats and water quality will be protected.

J.5.12 Danny Klein: Oral (PH-12)

Response to Comment PH-12-1

The 90-year old bridge, designed for a 50-year life span, has been retrofitted and repaired many times in the past and can no longer be repaired with enough scour mitigation to ensure structural stability. Bridge inspection studies show the current Trancas Creek Bridge structure can settle in a 10 year storm event due to scouring at the support structure. The existing bridge also has vertical cracks throughout the bridge structure.

Response to Comment PH-12-2

Alternative 3 has been chosen as the Preferred Alternative. The project is expected to take place between January 2020 and August 2021. The Preferred Alternative's construction time is expected to last 18-months.

Response to Comment PH-12-3

Caltrans does not currently have aggregate data for just the hot months in the project area. This data can be collected during design phase and a traffic management plan will be implemented during construction to ensure smooth traffic flow at all times.

Response to Comment PH-12-4

The 90-year old bridge, designed for a 50-year life span, has been retrofitted and repaired many times in the past and can no longer be repaired with enough scour mitigation to ensure structural stability. Bridge inspection studies show the current Trancas Creek Bridge structure can settle in a 10 year storm event due to scouring at the support structure. The existing bridge also has vertical cracks throughout the bridge structure.

J.5.13 Kay Collins: Oral #1 (PH-13)

Response to Comment PH-13-1

This transportation project will not be voted by the public but Caltrans cares deeply for the concerns of its public stakeholders and is required to engage the public, take into consideration of all the comments from the public, and make a choice on the Preferred Alternative after taking into consideration and providing responses to all the comments from the public. Caltrans take all the public comments we receive very seriously and will fully consider each public comment before the selection of the Preferred Alternative.

J.5.14 Kay Collins: Oral #2 (PH-14)

Response to Comment PH-14-1

Traffic control and a traffic management plan will be implemented to ensure smooth traffic flow and emergency vehicle access. PCH is expected to stay accessible through the entire duration of the construction period.

Response to Comment PH-14-2

The 90-year old bridge, designed for a 50-year life span, has been retrofitted and repaired many times in the past and can no longer be repaired with enough scour mitigation to ensure structural stability. Bridge inspection studies show the current Trancas Creek Bridge structure can settle in a 10 year storm event due to scouring at the support structure. The existing bridge also has vertical cracks throughout the bridge structure.

J.5.15 Stephanie Hawner: Oral (PH-15)

Response to Comment PH-15-1

The City of Malibu has had and will have additional opportunities to review the project.