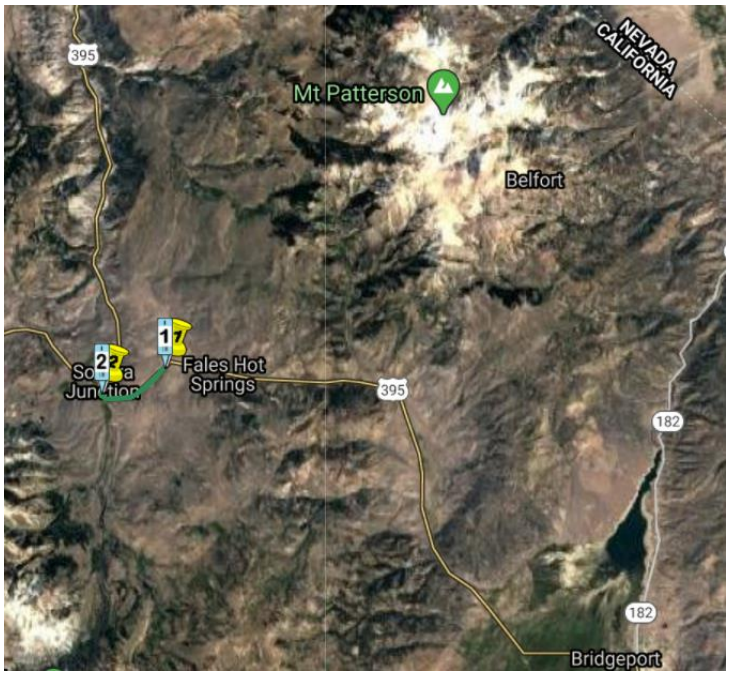
Sonora Junction Shoulders Project

MONO COUNTY, CALIFORNIA
DISTRICT 9 – MNO – 395 (PM 91.6/93.4)
09-36800/0917000011

Initial Study with Proposed Mitigated Negative Declaration / Environmental Assessment



Prepared by the
State of California, Department of Transportation

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.

January 2021

General Information about This Document

What's in this document:
The California Department of Transportation (Department), as assigned by the Federal Highway Administration (FHWA), has prepared this The California Department of Transportation (Department), as assigned by the Federal Highway Administration (FHWA), has prepared this Initial Study-Mitigated Negative Declaration/Environmental Assessment (IS-MND/EA), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Mono County, California. The Department is the lead agency under the National Environmental Policy Act (NEPA). The Department is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:
- Please read this document.
- Additional copies of this document and the related technical studies are available for review at the Caltrans District 9 Office located at 500 South Main Street, Bishop, CA 93514. This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-9
- We'd like to hear what you think. If you have any comments about the proposed project or would like to request a public meeting, please send your written comments or request via postal mail or email to the Department by the deadline.
- Send comments via postal mail to:
  Angela Calloway, Environmental Office Chief
  500 S. Main Street, Bishop, CA 93514
- Send comments via email to:
  Angela Calloway (angie.calloway@dot.ca.gov)
- **Be sure to send comments by the deadline: March 8, 2021.**

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

Alternative Formats:
For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Christine Knadler, Public Information Office Chief, 500 S. Main Street, Bishop, CA 93514; (760) 872-0601 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

09-MNO-395-PM 91.6/93.4
09-36800
0917000011

Widen paved highway shoulders, correct the super-elevation of three curves, add rumble strips, replace guardrails, and rehabilitate pavement throughout the project limits: U.S. 395, from Burcham Flat Rd. to just south of the intersection of U.S. 395 and S.R. 108 (Postmile 91.6 to Postmile 93.4)

INITIAL STUDY with Proposed Mitigated Negative Declaration/Environmental Assessment

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

THE STATE OF CALIFORNIA
Department of Transportation

Cooperating Agencies: U.S. Army Corps of Engineers
Responsible Agencies: U.S.D.A Humboldt-Toiyabe National Forest, California Transportation Commission, California Department of Fish and Wildlife, Lahontan Regional Water Quality Control Board

_02/01/2021_____
Date

Dennee Alcala
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Deputy District Director, Planning and Environmental
California Department of Transportation
NEPA Lead Agency

_02/01/2021_____
Date

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

Angela Calloway, Environmental Office Chief
500 S. Main Street, Bishop, CA 93514
Angie.calloway@dot.ca.gov
(760) 872 - 2424

PROPOSED MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (the Department) proposes to widen the paved highway shoulders, install rumble strips, rehabilitate asphalt pavement, and correct the super-elevation of three curves of U.S. 395 from postmile 91.6-93.4 in Mono County, California. There are three construction, or "build", alternatives under consideration, and one "no-build" alternative under consideration which would not build any portion of the project.

Determination

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

The Department has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment.

The proposed project would have no effect on: aesthetics [scenic vista, scenic resources, light glare]; agricultural and forest resources; air quality; biological resources [candidate/sensitive/special status species, movement of wildlife/nursery sites, preservation policies/ordinances, conservation plans]; cultural resources; energy; geology and soils; greenhouse gas emissions; hazards and hazardous materials [hazard to public/environment, hazardous emissions, hazardous site, airport, emergency response/evacuation plan, wildland fire exposure]; hydrology and water quality [groundwater decrease, pollutant release in hazard zones, water quality control/groundwater management plans, increase stream runoff]; land use and planning; mineral resources; noise; population and housing; public services; recreation; tribal cultural resources; utilities and service systems, and wildfire.

The project will have a less than significant effect on the following:

- Aesthetics [visual character]: the proposed project would have some impacts to the visual character of the area both during and after construction. During construction, heavy equipment and bare soil slopes will be visible by highway viewers. These conditions will be temporary as equipment will be removed after construction and bare slopes will be revegetated with native plants (commitment VIS-2). After construction has completed new visual elements including anchored wire mesh, guardrail, graded shoulders and retaining walls will be visible within the project area. These elements are common roadside features that already exist on US 395 both north and south of the proposed project. Treating metal features with camouflaging agent (Natina) will also help blend those structures blend into the surrounding landscape. If exclusionary wildlife fencing is installed, it will also be treated with Natina to help blend it into the surrounding landscape. Therefore, the measures proposed by the Caltrans Landscape Architect would minimize any less than significant impacts to visual/aesthetic resources:

    - VIS-1: Anchored wire mesh installed on cut slopes, metal beam guardrail, and retaining walls should be treated to match the color and all aesthetic treatments used on other projects in the vicinity. Color treatment, such as Natina, will also

help anchor wire mesh and metal beam guardrail to visually blend in with the background soil and vegetation, thereby reducing its noticeability by drivers.

- VIS-2: Disturbed slopes will be revegetated with native plant species after construction has completed. This will reduce the time needed for vegetation to regrow on the slopes, help avoid propagation of invasive plant species, and reduce soil erosion from wind and rain.

- VIS-3: The tops of cut slopes will be contoured into a rounded shape where feasible to mimic natural topography.

- VIS-4: Existing vegetation will be preserved to the greatest extent feasible by tightening contours, cut slopes and retaining walls during the Design phase of the project. Disturbance or removal of existing vegetation will only occur when necessary to construct the project.

- VIS-5: Retaining walls and slopes near Hot Creek should be aesthetically treated and revegetated with riparian species to the greatest extent feasible. Opportunities will be developed by the Caltrans Project Landscape Architect.

- VIS-6: If wildlife exclusionary fencing is approved and added to the project description, the fencing should be color treated, such as with Natina, to blend the fence visually into the background vegetation and soils.

- Biological Resources [aquatic resources]: As proposed, all three Build Alternatives (Alternatives 1, 2, and 3, and the optional wildlife crossing features) would temporarily impact wetlands. Wetlands will be avoided to the utmost degree feasible through the use of Environmentally Sensitive Area (ESA) fencing, which will constrain construction activities near the highway and away from wetlands which have been identified near the project area (but not within the project footprint). Some wetlands are anticipated to be temporarily impacted from construction equipment and personnel accessing the areas west of the highway to construct the widened shoulders, retaining walls, and creek diversion structures. The following measures are proposed for all three Build Alternatives to avoid or minimize less than significant impacts to riparian habitat and aquatic resources:

    - BIO-2: Environmentally sensitive area (ESA) fencing will be installed between the construction area and wetlands, waters, and riparian vegetation outside of the project impact area (PIA).

    - BIO-3: A full-time biological monitor will be onsite to monitor all construction activities in and around aquatic resources.

    - BIO-4: All construction personnel on site will receive training prior to construction which will include locations of ESA fencing and other conditions required to avoid or minimize impacts to aquatic resources.

    - WTR-1: All appropriate water pollution control Best Management Practices (BMPs) will be implemented prior to ground disturbance to avoid degradation of water quality from construction activities.

- WTR-2: The contractor will be required to prepare and submit for Caltrans approval a Stormwater Pollution Prevention Plan (SWPPP), which will outline the specific BMP types and placement locations to avoid water quality impacts.

- Biological Resources [migratory corridors]: The project area lies within a migratory corridor for the West Walker herd of Mule Deer, which are known to cross US 395 in or near the project limits during their spring and fall east-west migration. US 395 has bisected this corridor since it was built, and the proposed build alternatives would not add vehicular capacity to the highway or induce additional travel, therefore traffic patterns are expected to remain consistent with existing conditions. Wider shoulders and the removal of roadside vegetation will increase driver sight distances, deter deer from entering the shoulders to feed, and increase available area to maneuver around wildlife which may result in fewer deer-vehicle collisions, however this benefit cannot be quantified. During construction activities, human presence and noise from construction equipment may discourage deer from entering the highway corridor, however this condition will be temporary both daily (work hours restricted to daylight hours per County ordinances) and seasonally when weather conditions in northern Mono County often restrict construction to summer months. None of the proposed Build Alternatives or temporary construction activities would create additional barriers to migratory movement compared to the existing conditions and therefore would have a less than significant impact on wildlife movement in the project area. If the optional wildlife crossings and exclusionary fencing is approved, an opportunity to benefit wildlife movement in the project area would be added to the project.

- Hazards and Hazardous Materials (transport/use/disposal of hazardous material): The proposed project may require the routine disposal of treated wood waste from existing guardrail posts. Any treated wood, which requires disposal will be handled and disposed of at an appropriate facility following all Caltrans standard procedures and State or County regulations. It is currently not anticipated that roadside soils will be transported offsite for disposal, however if this becomes necessary, testing for aerially deposited lead will occur and soils will be handled and disposed of at an appropriate facility following all Caltrans standard procedures and State or County regulations. The following measures are proposed for all three Build Alternatives to avoid or minimize potential impacts to less than significant from hazardous materials.

    - HAZ-1: Disposal of treated wood waste will follow Caltrans standard specifications and all State and County requirements.

    - HAZ-2: If disposal of roadside soils is required, Aerially Deposited Lead (ADL) testing will occur to confirm the presence or absence of lead contamination. If confirmed, soil disposal will adhere to all Caltrans standard specifications as well as State and County requirements.

- Hydrology and Water Quality [erosion from stream alteration, increase in impervious surfaces] - The proposed project includes working within running waters and diverting Hot Creek. Standard measures are proposed to lessen erosion through the use of standardized Best Management Practices (BMPs) used on all Caltrans projects for stormwater and water quality control. Hot Creek will be redirected away from the highway shoulder slopes, but the hydraulic capacity of the creek should not change significantly and any impacts from the diversion during high water flows will be less than significant.

- Transportation Per CEQA Guidelines section 15064.3, subdivision (b), transportation projects that reduce, or have no impact on vehicle miles traveled should be presumed to cause a less than significant transportation impact. The proposed project is neither capacity increasing nor a project that will lead to an increase in development or population. Based on 2018 Traffic Volumes and 2018 Annual Average Daily Truck Traffic (AADT) data, an assumed annual growth rate of 0.5%.Therefore, it will have a less than significant impact on vehicle miles traveled.

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

- Biological Resources [aquatic resources]: As proposed, all three Build Alternatives (Alternatives 1, 2, and 3, and the optional wildlife crossing features) would temporarily impact wetlands and permanently impact riparian habitats and streams (Hot Creek). Diverting Hot Creek will result in permanent impacts to riparian habitat and water resources as the creek is diverted during construction and established into a new course. Impacts to Hot Creek and wetlands will require CDFW 1600, Army Corps of Engineers 404, and State Water Quality Control Board 401 permits. These permit applications will be submitted after an alternative is chosen and precise impact areas are calculated, and often include specific avoidance, minimization and/or mitigation measures. Until the specific mitigations are known, the following mitigation measure is proposed for all Build alternatives to mitigate for permanent impacts to aquatic resources.

    - BIO-5: Mitigation for permanent impacts to waters and riparian vegetation within the project impact area will be in the form of purchasing credits from a mitigation bank or by paying into an in-lieu fee (ILF) program. Final credit amounts and ratios will be determined through coordination with regulatory agencies during the permit application process.

_____ _____

Dennee Alcala
Deputy District Director
Planning and Environmental
District 9
California Department of Transportation

Date

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Chapter 1 – Proposed Project

Introduction

NEPA Assignment

California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program) pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the Department entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with FHWA. The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016, for a term of five years. In summary, the Department continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and the Department assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to the Department under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

The California Department of Transportation (Department), as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA). The Department is the lead agency under the California Environmental Quality Act (CEQA).

The California Department of Transportation (the Department) proposes to widen the paved highway shoulders, install rumble strips, rehabilitate asphalt pavement, and correct the super-elevation of three curves on approximately 2 miles of U.S. 395 from postmile 91.6 to 93.4 in Mono County, California. There are three construction, or "build", alternatives under consideration, and one "no-build" alternative which would not build any portion of the project. Within the project limits, U.S. 395 is a two-lane conventional highway and is a rural part of an interregional road system connection between Southern California, the Eastern Sierra Region (Inyo and Mono Counties), and Western Central Nevada. U.S. 395 is a designated State Scenic Highway within the limits of this project.

The terrain through the project limits is comprised of rolling hills, wetland meadows, and steep slopes that pass through the Sierra Nevada Mountains and the Humboldt-Toiyabe National Forest. Roadway elevations vary from 6,955 to 7,155 feet above sea level. Seasonal temperatures are extreme, ranging from below 0 degrees to 100 degrees Fahrenheit. The area receives snow and is regularly plowed in winter months.

Hot Creek runs roughly parallel to U.S. 395 within the project limits in a confined channel approximately ten to fifteen feet lower than the roadway surface, and in places is close to or touching the slopes directly below the highway shoulders. The creek crosses underneath the highway in three locations and shortly after the end of the project limits, joins the West Walker River near Sonora Junction (S.R. 108).

The existing roadway consists of one 12-foot lane in each direction (north and south) with shoulders that average approximately 2 feet wide. The current highway alignment was built in

1931 and no major alterations to the roadway design has occurred since then. The design speed and posted speed limit are currently 65 miles per hour.

The Sonora Junction Shoulder Widening Project was proposed by the Caltrans District 9 Department of Traffic Operations and Maintenance and has conceptual approval of funding from the 201.015 – Collision Severity Reduction Program. It is consistent with the Caltrans District 9 U.S. Highway 395 Transportation Concept Report (2014) and the Mono County Regional Transportation Plan (2018).

There are three “build” alternatives under consideration for the project, and one “no-build” alternative. The build alternatives (Alternatives 1, 2, and 3) differ in the width and locations of shoulder widenings within the project limits. Alternative 1 proposes to widen the shoulders to four feet throughout the project area, Alternative 2 proposes using variable widths between four and eight feet, and Alternative 3 proposes to widen the shoulders to eight feet throughout the project area. Alternative 2 would widen shoulders to eight feet everywhere except PM 92.56 to PM 92.90 on the southbound side, which would have four foot shoulders. This would result in approximately 0.34 mile of improved 4-foot shoulders and 1.46 miles of improved 8-foot shoulders.

The ten-year accident history from January 1, 2010 to December 31, 2019 recorded 27 collisions. All collisions were property damage only and 16 were the result of vehicle verses deer; this corridor is also a known deer migration area. The increased visibility and maneuvering room provided by wider shoulders is expected to improve both driver and wildlife safety in the project limits as well as to provide a consistent shoulder width on US 395 within the vicinity. To provide additional benefit to wildlife, an option for the addition of two oversized culverts underneath the highway and exclusionary fencing has been proposed. Addition of this work is dependent on funding and partner agency approval.

The tentative project schedule is as follows: public circulation of the draft environmental document will occur from 2/1/2021 – 3/1/2021, final selection of a preferred alternative and completion of the final environmental document 5/1/2021, final design and acquisition of environmental permits will be completed prior to 6/8/2023, and construction would likely begin in the spring or summer of 2024. The construction schedule would be finalized during final design, however at this point it is anticipated construction activities would be completed before 7/30/2025. Please note the above dates are tentative and subject to change based on alternative selection, funding, weather delays etc. and are mentioned to provide the interested public an estimated timeline of the project process.

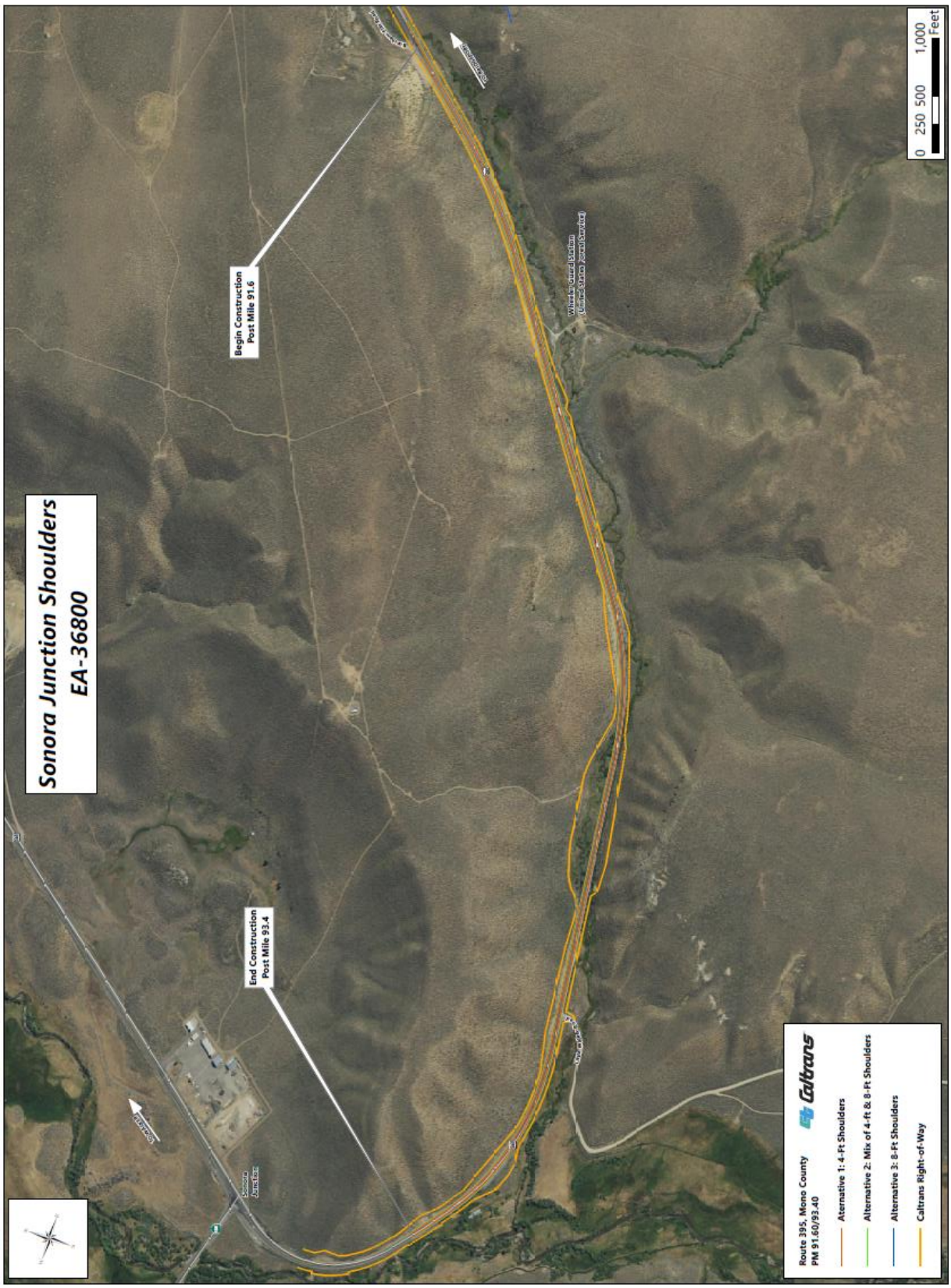


Figure 1 - Overview Map of Build Alternatives

Purpose and Need

The project "purpose" is a set of objectives the project intends to meet. The project "need" is the transportation deficiency that the project was initiated to address.

1. The Purpose of this project is to reduce accidents, enhance safety, and make the road accessible to all modes of transportation by accommodating bicycles and pedestrians.
2. This project is needed because the accident history for the 10-year period from January 1, 2010 to December 31, 2019 is above the statewide average. Highway shoulder widths and guardrail systems do not meet current standards.

The terrain through the project limits is rolling, high mountain terrain that passes through the Sierra Mountains and the Humboldt-Toiyabe National Forest. Roadway elevations vary from 6955 ft to 7155 ft. This area receives snow and is regularly plowed in winter. Within the project limits, the roadway consists of two 12-foot lanes with 2-foot paved shoulders. The posted speed limit is 65 mph.

The proposed project is consistent with the 2019 Mono County RTP. The RTP includes needs, goals and actions for the provision of wider shoulders for bike and other uses as a component of rehabilitation and maintenance projects on streets and highways, and acknowledges that adding adequate shoulder during projects enables safe pedestrian and bike use; increases motorist safety; and improves system safety and maintenance."

Independent Utility and Logical Termini

Federal Highway Administration (FHWA) regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the action evaluated:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope.

2. Have independent utility or independent significance (be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made).

3. Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

The proposed project limits encompass a segment of U.S. 395 bordered by segments recently upgraded to current standards on both the north and south ends. Therefore, this project has independent utility and does not rely on future projects to be usable or reasonable. No reasonably-foreseeable future transportation projects will be limited by the proposed project.

Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The three "Build" alternatives are Alternative 1, Alternative 2, and Alternative 3, and there is one "No-Build Alternative." The No-Build alternative would not build the project and the segment would remain unchanged from its current condition. Unless otherwise noted, all discussion of impacts in this document refer to specific Build alternatives.

Within the project limits, U.S. 395 is a two-lane conventional highway and is a rural part of an interregional road system connection between Southern California, the Eastern Sierra Region (Inyo and Mono Counties), and Western Central Nevada. U.S. 395 is a designated State Scenic Highway within the limits of this project. The roadway currently consists of one 12-foot lane in each direction of travel (north and south) with shoulders that average approximately two feet wide, while the current highway standard is eight-foot shoulders. The current highway alignment was built in 1931 and no major alterations to the roadway design has occurred since then. The design speed and posted speed limit are currently 65 miles per hour. The purpose of this project is to bring highway features into current standards and provide alternative transportation options for cyclists and pedestrians.

Generally, all three build alternatives (1-3) would widen the existing highway shoulders within the project limits and install ground-in rumble strips. The major differences between the build alternatives are the extent and locations of shoulder widening. The environmental study limits used for this project extend outside of the project footprint in all directions and are sufficient to capture potential impacts from any alternative.

Alternatives

Common Design Features of the Build Alternatives

All three build alternatives will remove vegetation where the wider shoulder requires slope work or excavation to construct retaining walls. Grading and Earthwork will also impact vegetation where embankment hinge points need to be reestablished behind guardrails. Culverts will need to be extended for each alternative to accommodate the wider shoulders; at least two culverts will require extension under each alternative. Culvert work will require working in and around running water and riparian vegetation.

All three build alternatives propose to realign Hot Creek in one location (postmile 92.36-92.38, see figures 3, 4, and 5). This area currently has a steep eroded slope that drops directly from the highway to the creek. Realigning the creek and reconstructing the slope will help prevent further erosion and undermining of the retaining wall. During construction, the creek would be diverted into the lower section so that this work can be performed in the creek channel. The proposed work in the Hot Creek channel is outside of existing Caltrans' right-of-way, therefore construction easements will be required.

New asphalt, lane markings and rumble strips would then be placed on the highway pavement surface. The existing guardrail be removed and replaced with the current standard Midwest guardrail system at the edge of the new shoulders.

In addition to the work items listed above, additional grading and vegetation removal will occur on Alternatives 2 and 3. Under these two alternatives, the horizontal super elevation of three existing highway curves will also be corrected. This work will involve removing the existing asphalt surface and re-grading the surface to create standard curve geometry throughout the curve. Additionally, where steep cut slopes occur on Alternatives 2 and 3, anchored wire mesh is proposed to be placed on the slopes to stabilize them. Vegetation will be removed from the cut slope areas where mesh will be placed for slope stabilization. There are no obvious trees that will require removal but work in riparian areas will be required.

Optional Wildlife Crossing Measures

All alternatives have the option to construct wildlife undercrossing structures and exclusionary fencing. The wildlife crossing features are included as an option if project funding and partner agency approval allows.

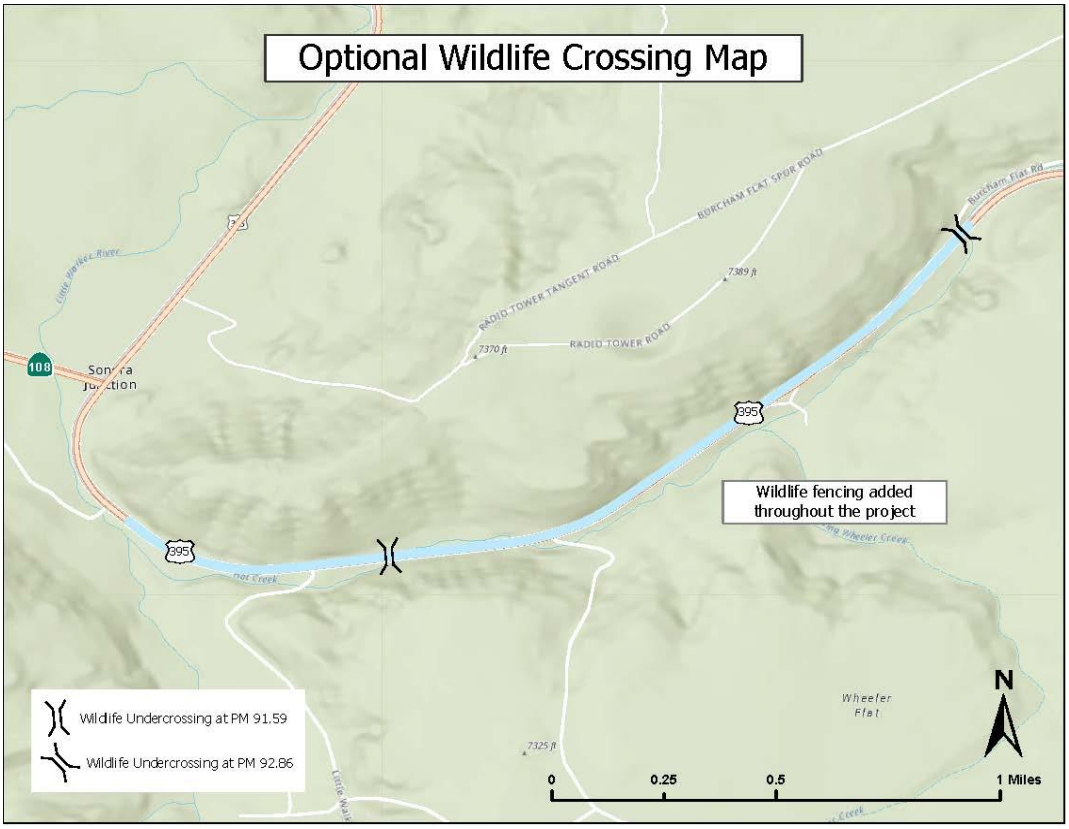


Figure 2 – Wildlife Crossing Measures Proposed Features

The purpose of including the wildlife-crossing features is to provide an added opportunity for the installation of preventative measures to help benefit wildlife. Specifically, these features are being proposed as way to reduce additional deer-vehicle collisions as well as other wildlife-vehicle casualties.

There are two options related to Wildlife Crossings:

1. Option A: Install wildlife undercrossing structures at PM 91.59 and PM 92.86.

2. Option B: Install wildlife undercrossing structures at PM 91.59 and PM 92.86 and install wildlife exclusionary fencing connecting the two structures.

The proposed undercrossing structures are corrugated steel plate pipe arches (16.5 x 11 feet and 13.5 x 9.5 feet). The materials for these structures are already owned by the State, so they would be State furnished. The wildlife exclusionary fence will be 8 feet high, with graduated wire mesh on metal posts. Fencing would be painted or stained a natural color to blend with the surrounding area. Access gates and wildlife jump-outs would be included where necessary. A 28-foot double-cattleguard would be needed on Burcham Flat Road to ensure wildlife exclusion

connectivity between the crossing structures. If approved, the fencing is proposed to be placed within project limits as depicted in Figure 2; however, the exact fencing locations and features will be determined during design finalization. Both options will require Temporary Construction Easements for fence and undercrossing construction.

The inclusion of Wildlife Crossing Option A would add approximately $255,000 to the project cost; Option B would add approximately $516,500 to project cost. (District 9 Environmental staff are researching covering some of these costs with wildlife-specific grant funding.) By constructing these features as part of this highway project, rather than as a stand-alone project, total costs and impacts to the travelling public could be reduced.

Additional right-of-way will be needed for Option B:

- PM 91.59 to 91.69 (Right), USFS, for fencing – 0.60 acre USFS
- PM 91.59 to 92.16 (Left), USFS, for fencing – 1.65 acres USFS

Unique Features of Build Alternatives

This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2. Unique features for each of the alternatives is discussed below.

Alternative 1 – 4-foot Shoulders

Alternative 1 proposes to build 4-foot wide northbound and southbound highway shoulders throughout the project limits.

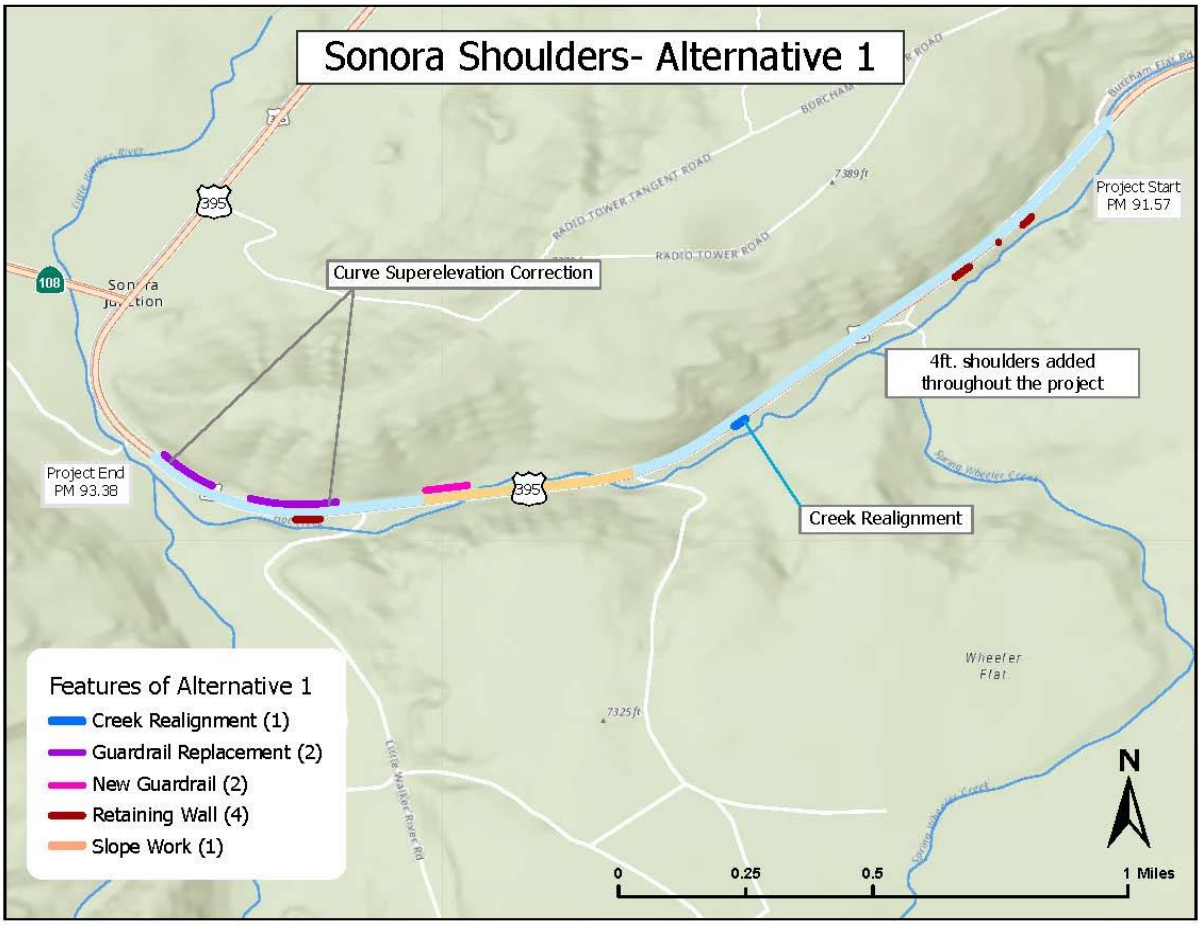


Figure 3 - Alternative 1 Major Proposed Features

Alternative 1 is the alternative with the least amount of widening on the highway shoulders and thus, requires fewer project features than if widening the shoulders beyond four feet. This alternative proposes four sections of retaining walls for an estimated 440 feet of new retaining walls on the southbound side of the highway. Alternative 1 does not include extensive slope work on the northbound side of U.S. 395 and is not expected to require anchored wire mesh to support slope stability. Three culverts are anticipated to be extended or replaced to accommodate the new 4-foot shoulders, three sections of guardrail would be replaced, and one section of new guardrail will be installed outside of the new shoulders. The total amount of

guardrail work equals approximately 2,850 linear feet. Alternative 1 would require 0.09 acre of new right-of- way and temporary construction easements.

Alternative 2 – Hybrid 4-foot and 8-foot Shoulders

Alternative 2 represents a design option which includes eight-foot-wide shoulders for much of the project except for a section of highway just under 0.5 mile long on the southbound side where shoulders will be widened to four feet (PM 92.56 to 92.90). This small section of four-foot shoulder occurs where Hot Creek comes close to and runs roughly parallel to the highway. As a result, Alternative 2 will have more of an impact to riparian resources than Alternative 1, and only slightly less of an impact than Alternative 3.

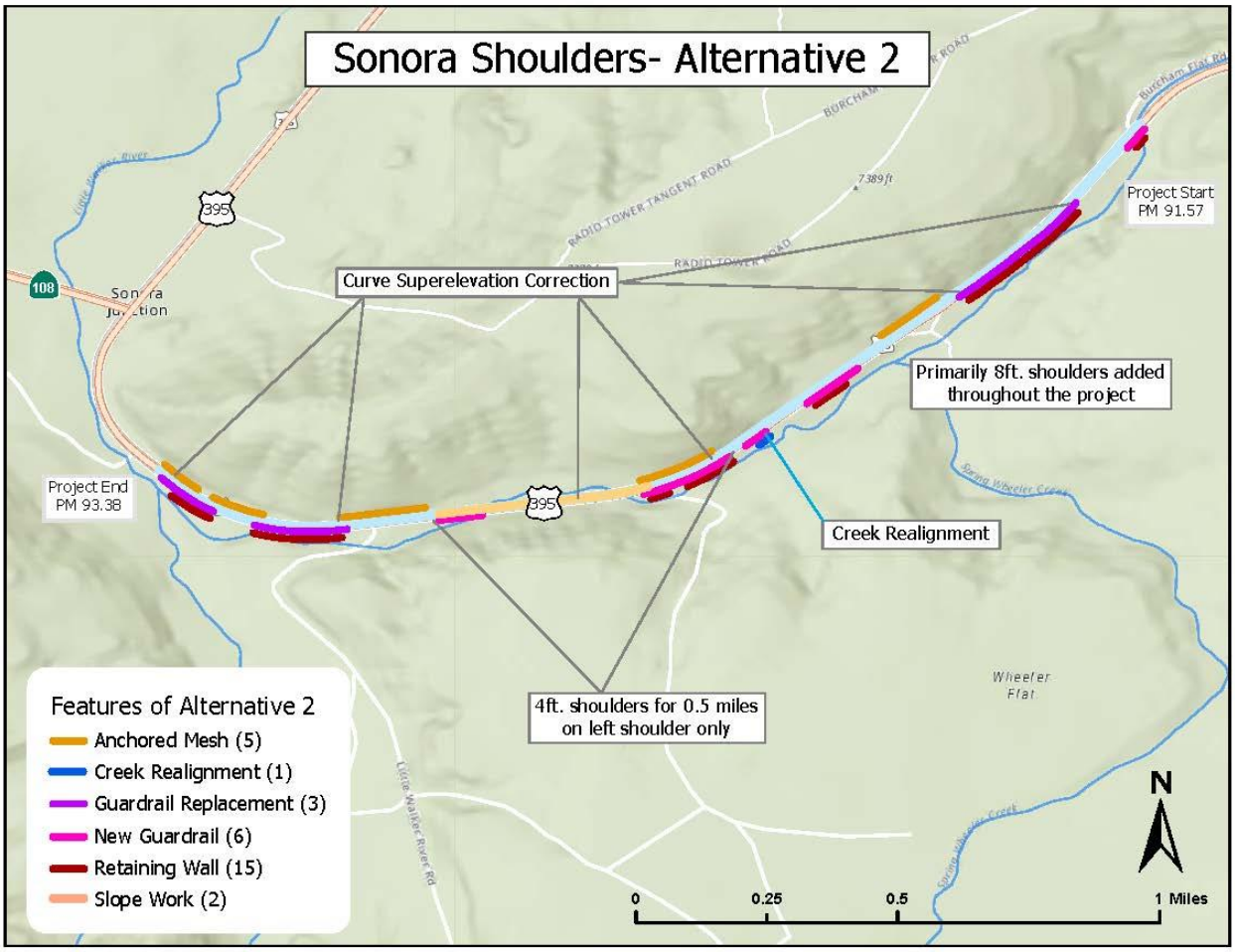


Figure 4 - Alternative 2 Major Proposed Features

The wider shoulders under Alternative 2 will necessitate deeper hillside roadcuts and more fill than Alternative 1. Seven new retaining walls built in 15 section on the southbound side of the highway totaling approximately 3,400 linear feet are proposed as are five sections of cut-slope on the northbound side of the highway. Stabilization of these sections of cut-slope will require the installation of anchored wire mesh at five locations. Six existing culverts would need to be extended or replaced and two new culverts would be installed to facilitate water conveyance beneath the highway. Guardrail would be replaced at three locations and new guardrail would be installed at six locations, equaling a total 4,710 linear feet of guardrail work. New right-of-way

would be needed in two locations totaling 0.68 acre and temporary construction easements would be needed in four locations for creek diversion, cut slopes, and new culvert installation.

Alternative 3 – 8-foot Shoulders

Alternative 3 represents the alternative with the largest amount of total shoulder widening and therefore, the largest project footprint. This alternative would construct eight-foot shoulders on both the northbound and southbound sides of the highway throughout the project limits. The larger shoulder widths would create additional room for disabled vehicles to pull off of the highway or maneuver around roadway objects or wildlife. Per the 2020 Caltrans Highway Design Manual the current standard shoulder width for rural conventional highways is eight feet.

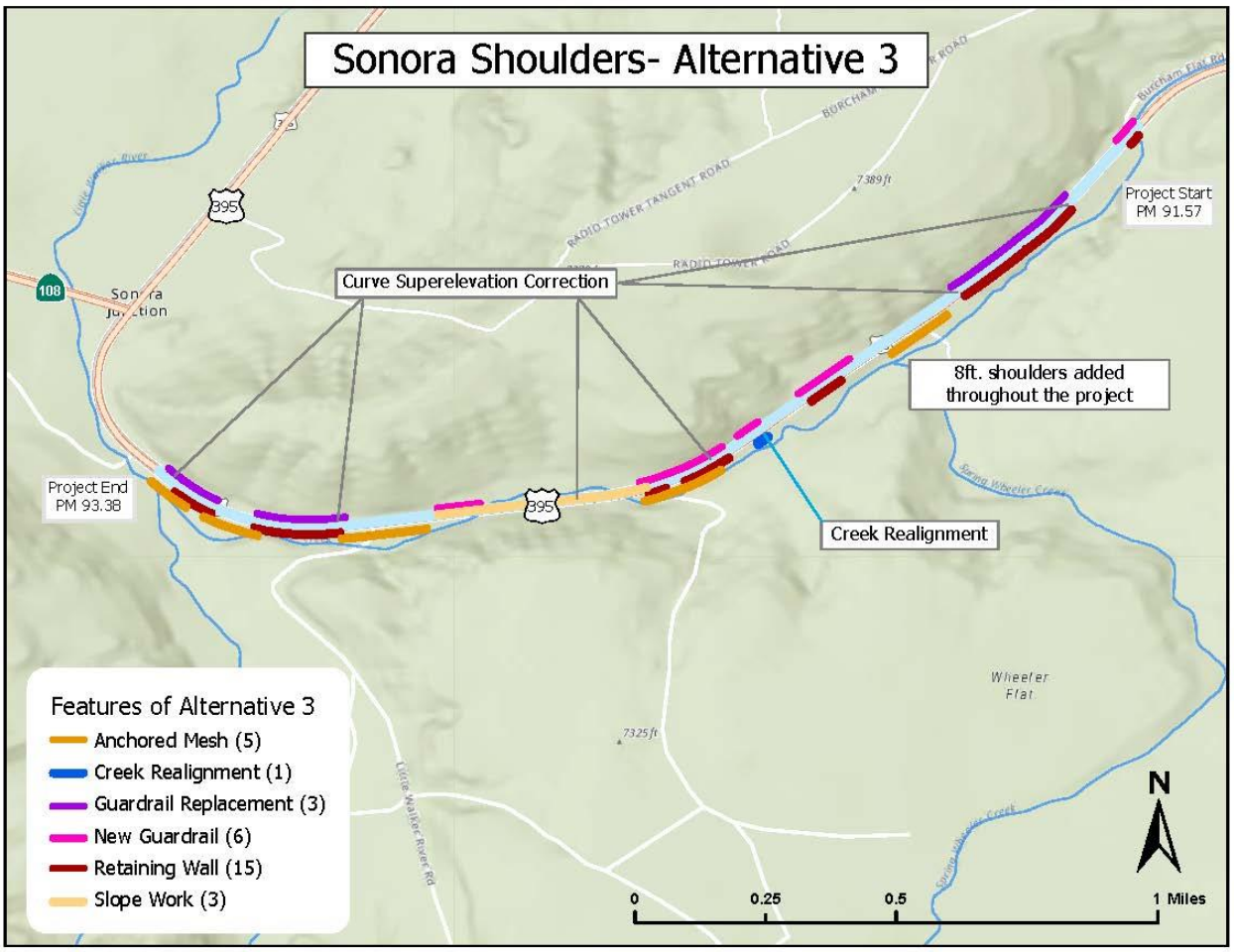


Figure 5 - Alternative 3 Major Proposed Features

Alternative 3 represents the alternative with the largest amount of total shoulder widening and therefore, the largest project footprint. This alternative would construct eight-foot shoulders on both the northbound and southbound sides of the highway throughout the project limits. The larger shoulder widths would create additional room for disabled vehicles to pull off of the highway or maneuver around roadway objects or wildlife. Per the 2020 Caltrans Highway Design Manual the current standard shoulder width for rural conventional highways is eight feet.

Alternative 3 would require 7 retaining walls to be built in 15 sections on the southbound side of the highway totaling an estimated 3,400 linear feet. These walls are the same as what would be

required under Alternative 2, but more than would be required under Alternative 1. Also shoulder widths for Alternative 3 would require cutting back slopes on the northbound side of the highway and anchored wire mesh is expected to be installed to promote slope stability in five sections. Alternative 3 would require approximately three areas of imported fill material to support the wider shoulders, which is more than either Alternative 1 or 2 (each requires one area of fill). Six culverts would need to be extended or replaced to accommodate the wider shoulders, and one additional culvert would be added in the project limits for Alternative 3; these are the same culverts which would be extended, replaced and added under Alternative 2. Alternative 3 proposes to replace and construct new guardrail in the same nine sections as Alternative 2 for a total of approximately 4,710 linear feet. Additional Caltrans Right of Way would need to be acquired in three locations to accommodate anchored wire mesh and slope work. This is one more location than Alternative 2, and two more locations than needed to construct Alternative 1. The total amount of new Right of Way for Alternative 3 is 0.77 acre. Four locations would require temporary construction easements to allow work to occur outside of Caltrans' right-of-way.

Comparison of Alternatives

Table 1 (below) indicates major project features which would be constructed for each build alternative as described in the preceding paragraphs. Potential impacts of each alternative on environmental resources are described under the appropriate resource section in Chapters 2 and 3 of this document. At this point in the project development process, Caltrans has not identified a preferred project alternative.

Table 1 - Comparison of major features for three "build" alternatives. All lengths and locations are approximate.

Feature	Southbound "SB" or Northbound "NB" Side	Alt 1	Alt 2	Alt 3	Postmile	Linear Feet (Approximate)
Retaining Wall 1	NB	No	Yes	Yes	91.58-91.60	105
Retaining Wall 2	NB	No	Yes	Yes	91.74-91.77	200
	SB	Yes	Yes	Yes	91.77-91.79	75
	SB	No	Yes	Yes	91.79-91.83	200
	SB	Yes	Yes	Yes	91.83	25
	SB	No	Yes	Yes	91.83-91.90	375
	SB	Yes	Yes	Yes	91.90-91.93	150
	SB	No	Yes	Yes	91.93-91.96	175
Retaining Wall 3	SB	No	Yes	Yes	92.20-92.26	360
Retaining Wall 4	SB	No	Yes	Yes	92.42-92.50	445
Retaining Wall 5	SB	No	Yes	Yes	92.53-92.56	175
Retaining Wall 6	SB	No	Yes	Yes	93.06-93.08	110
	SB	Yes	Yes	Yes	93.08-93.12	190
	SB	No	Yes	Yes	93.11-93.20	425
Retaining Wall 7	SB	No	Yes	Yes	93.27-93.34	375
Creek Realignment	SB	Yes	Yes	Yes	92.36-92.38	Approx. 1056
Anchored Wire Mesh 1	NB	No	Yes	Yes	92.00-92.11	24,400
Anchored Wire Mesh 2	NB	No	Yes	Yes	92.44-92.57	37,200
Anchored Wire Mesh 3	NB	No	Yes	Yes	92.92-93.06	29,000
Anchored Wire Mesh 4	NB	No	Yes	Yes	93.19-93.28	19,200
Anchored Wire Mesh 5	NB	No	Yes	Yes	93.31-93.38	15,600
Culvert (replace)		Yes	Yes	Yes	91.59	

Feature	Southbound "SB" or Northbound "NB" Side	Alt 1	Alt 2	Alt 3	Postmile	Linear Feet (Approximate)
Culvert (extend/replace)		No	Yes	Yes	91.83	
Culvert (extend/replace)		No	Yes	Yes	91.95	
Culvert (new)		No	Yes	Yes	92.35	
Culvert (extend/replace)		Yes	Yes	Yes	92.63	
Culvert (extend/replace)		Yes	Yes	Yes	92.85	
Culvert (extend/replace)		No	Yes	Yes	93.18	
Guardrail (New) approximate		No	Yes	Yes	91.57-91.61	195
Guardrail (replace)		Yes	Yes	Yes	91.73-91.67	1300
Guardrail (New) approximate		No	Yes	Yes	92.17-92.27	535
Guardrail (New) approximate		Yes, if wall	Yes	Yes	92.35-92.39	200
Guardrail (New) approximate		No	Yes	Yes	92.42-92.57	800
Guardrail (New) approximate	Both	No	Yes	Yes	92.83-92.87	200
Guardrail (New) approximate		No	Yes	Yes	92.87-92.90	150
Guardrail (replace)		Yes	Yes	Yes	93.05-93.20	785
Guardrail (replace)		Yes	Yes	Yes	93.27-93.37	545
Slope Work (fill)	NB	No	Yes	Yes	92.71-92.73	
Slope Work (fill)	SB	Yes	Yes	Yes	92.56-92.90	
Slope Work (fill)	NB	No	Yes	Yes	92.84-92.87	
Additional Right of Way	NB	No	Yes	Yes	91.97-92.13	
Additional Right of Way	SB	Yes	Yes	Yes	92.35-92.36	
Additional Right of Way	SB	No	No	Yes	92.85-92.90	
Additional Right of Way	Both	Optional	Optional	Optional	91.59-92.86	

Feature	Southbound "SB" or Northbound "NB" Side	Alt 1	Alt 2	Alt 3	Postmile	Linear Feet (Approximate)
Optional Wildlife Crossing 1		Optional	Optional	Optional	91.59	
Optional Wildlife Crossing 2		Optional	Optional	Optional	92.86	
Optional Deer Fencing	Both	Optional	Optional	Optional	91.59-92.86	13,700
Estimated Project Cost (Non-escalated)		Alt 1 $3,456,000	Alt 2 $13,378,000	Alt 3 $14,144,000		

No-Build (No Action) Alternative

The No-Build alternative would not construct any portion of the proposed project and the highway would remain in its current condition. The No-Build Alternative would not meet the project's purpose and need and safety issues would continue to be present at this location on U.S. 395.

Alternatives Considered but Eliminated from Further Discussion

At this stage in the project development process, no alternatives have been removed from consideration. All three build alternatives (Alternatives 1, 2, and 3) as well as the No-Build alternative are currently being considered.

Reversible Lanes

Assembly Bill 2542 amended California Streets and Highways code to require, effective January 1, 2017, that Caltrans or a regional transportation planning agency demonstrate that reversible lanes were considered when submitting a capacity-increasing project or a major street or highway lane realignment project to the California Transportation Commission for approval (California Streets and Highways Code, Section 100.015). The proposed project will not increase highway capacity or result in a major realignment of the highway and therefore does not meet the criteria to consider reversible lanes.

After the public circulation period, all comments will be considered, and the Department will select a preferred alternative and make the final determination of the project's effect on the environment. Under the California Environmental Quality Act (CEQA), if no unmitigable significant adverse impacts are identified, the Department will prepare a Negative Declaration (ND) or Mitigated ND.

Similarly, if the Department, as assigned by the Federal Highway Administration (FHWA), determines the National Environmental Policy Act (NEPA) action does not significantly impact the environment, the Department will issue a Finding of No Significant Impact (FONSI).

Permits and Approvals Needed

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

Agency	PLAC	Status
United States Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the United States.	Waters of the US have been identified within the project footprint and would be permanently and/or temporarily impacted by any of the build alternatives. A 404 permit would be acquired after selection of a preferred alternative and before construction activities begin (prior to June 2023)
California Department of Fish and Wildlife	1602 Agreement for Streambed Alteration	Applications for 1602 permit for alteration of streambed and riparian habitat for any of the build alternatives. Permit expected after an alternative is chosen and prior to construction activities begin (prior to June 2023)
California Water Resources Board – Lahontan Region	401 Permit	Waters of the State have been identified within the project footprint and would be permanently and/or temporarily impacted by any of the build alternatives. A 401 permit would be acquired after an alternative is chosen and prior to construction activities (prior to June 2023)
California Transportation Commission	CTC vote to approve funds	Following the approval of the FED, the California Transportation Commission will be required to vote to approve funding for the project. Vote expected to occur at earliest CTC meeting after final environmental document is submitted (May 2021)
United States Department of Agriculture Forest Service	Federal Land Transfer	A total of 0.77 acres of new Right of Way will need to be acquired from Humboldt-Toiyabe National Forest lands. This amount would increase to a total of 3.07 acres if the optional wildlife exclusionary fencing is approved.

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

TOPICS CONSIDERED BUT DETERMINED NOT TO BE RELEVANT

As part of the scoping and environmental analysis carried out for the project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document.

Human Environment

Land Use
The proposed project rehabilitates/improves the existing transportation facility (highway). There will be no change or effects to land use.

Coastal Zone
There will be no effects to coastal resources because the project is not located within the coastal zone.

Environmental Justice
The proposed project is in a rural area with few nearby residents. A data search at www.data.census.gov (8/19/20) returned the following demographic information for Mono County: the total population is approximately 18,474 people, of which 84.8% are White. The median annual income is $63,018 and the unemployment rate is 10.4%. According to the Department of Health and Human Services, the poverty level for a family of four in America in 2020 is $26,200 (https://aspe.hhs.gov/poverty-guidelines). 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 Executive Order 12898.

Wild and Scenic Rivers
There are no Nationally designated Wild, Scenic, or Recreational Rivers within or near the project area per a search of the National Wild and Scenic Rivers System database (https://www.rivers.gov/california.php; 8/19/20). There will be no effects to Wild and Scenic Rivers.

Parks and recreational Facilities
There are no parks or other recreational facilities within the project limits. An aerial search using Google Earth, Google Maps, and LandVision revealed the majority of land outside of Caltrans' right-of-way either belongs to the Humboldt-Toiyabe National Forest or is private property, with no public parks or recreational facilities.

Farmlands
Per a search of the California Department of Conservation's Important Farmland Mapping Tool, there are no designated Prime, Unique or Farmlands of Statewide Importance in or near the proposed project limits. The project will not have any effect on protected Farmlands, including those under the Williamson Act, or convert any farmlands into non-agricultural use since none exist near the project. (https://maps.conservation.ca.gov/DLRP/CIFF/; 8/19/20).

Timberlands
Impacts to timberland are analyzed as required by the California Timberland Productivity Act of 1982 (CA Government Code Sections 51100 et seq.), which was enacted to preserve forest resources. Similar to the Williamson Act, this program gives landowners tax incentives to keep their land in timber production. Contracts involving Timber Production Zones (TPZs) are on 10-year cycles. Searches of Mono County Planning documents, the California Department of Conservation website and the California Department of Forestry and Fire Protection (CALFIRE) website showed no designated timberlands or Timber Production Zones in or near the project vicinity. The project will have no effect on protected Timberlands since none exist in the project area.

Growth
The proposed project is located in a rural, sparsely-populated area and would not increase the vehicle capacity of the highway or otherwise affect growth. Due to the project's scope and setting, it will have no impacts on growth.

Community Character and Cohesion
The project area is rural and sparsely populated. Widening the existing highway shoulders is not expected to have any impact on community character and cohesion as few residences exist near the project area and no barriers to access would be constructed. The addition of wider shoulders could allow increased cyclist use of the highway and may benefit multi-modal cohesion in the general area.

Relocations and Real Property Acquisition
No residential or commercial relocations would occur for any alternative under consideration. Minor sections of additional right-of-way would need to be acquired to construct portions of some alternatives however these areas are undeveloped and would not result in relocations or impacts to property owners. Caltrans Right-of-Way staff will contact and coordinate with private and government landowners in the area after an alternative is chosen.

Utilities/Emergency Services
No utilities are expected to be moved or impacted by construction of any of the build alternatives. Emergency access through the construction area will be maintained through Caltrans standard traffic control measures which often include flaggers and pilot cars if lanes are closed during construction.

Traffic and Transportation/Pedestrian and Bicycle Facilities
The proposed project will widen paved highway shoulders and install ground-in rumble strips between the fog line and edge of shoulder. The facility will be better suited for pedestrians and cyclists after any of the three build alternatives are constructed, compared to existing conditions (two-foot shoulders). During construction, standard Caltrans protocols including one-way lane management, flaggers and pilot vehicles will be used to ensure traffic delays are minimized and that multi-modal users accommodated.

Floodplains
There will be no effects to the 100-year floodplain because the project is not located within a 100-year base floodplain. See Appendix I. for FEMA Floodplain Map.

Air Quality
The project area is not within a nonattainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide, PM2.5 or PM10 per the EPA Green Book and therefore Transportation

Conformity does not apply to the project. A short-term mesoscale degradation of air quality could occur during construction activities; however Caltrans standard dust control and emissions standards will be implemented so no impacts are anticipated.

Noise
The project is exempt from noise analysis and abatement as a Type III project per 23 CFR 772. Temporary elevation of noise levels from construction activities would occur under any build alternative, however there are no sensitive receptors in the project area and all activities will be constrained by local and regional work-hour restrictions. No impacts are anticipated.

Threatened and Endangered Species
A US Fish and Wildlife Service species list was obtained for this project (see Appendix H). Each of the build alternatives would have No Effect on any listed threatened or endangered species or critical habitat. This project is located outside of NOAA Fisheries Service jurisdiction; therefore, a NOAA species list is not required and no effects to NOAA species are anticipated.

Section 4(f)
There are no historic sites, parks and recreational resources, wildlife or waterfowl refuges which meet the definition of a Section 4(f) resource within the project vicinity. Therefore, this project is not subject to the provisions of Section 4(f) of the Department of Transportation Act of 1966.

Human Environment

VISUAL/AESTHETICS

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) 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]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

Affected Environment

The following analyses of potential impacts to visual/aesthetic resources are based on a Visual Impacts Analysis (VIA) prepared by a Caltrans Licensed Landscape Architect in July 2020. Prior to preparing this report, the Landscape Architect completed a Caltrans Visual Questionnaire (2017) in order to determine the level of analysis needed for this project.

The proposed project's visual setting is characterized by steep and rugged mountains with narrow to broad valleys. Groundcover on the steep slopes contains a mix of sagebrush shrubland with small patches of riparian woodlands near creeks and rivers. Cut-slopes with low to moderate natural revegetation are common. The setting within the project limits is rural and the only structures visible from the highway are a ranch where Spring Wheeler Creek intersects with Hot Creek, and a ranch where Hot Creek feeds into the Little Walker River. There are no scenic resources (e.g. a tree that displays outstanding features of form or age, a unique or massive rock formation, or a historic building that is a rare example of its period, style, or design) identified within the project limits. U.S. 395 is a designated State Scenic Highway in Mono County from postmile 76.8 to 104.8, which includes the proposed project area.

The existing visual character within the project limits consists of a two-lane roadway with narrow or no shoulders. In this area the U.S. 395 corridor navigates the narrow Hot Creek and Little Walker River valleys then enters the wider Burcham Flat area near Sonora Junction where views open up of the mountainous terrain of the Sierra Nevada Range. There are several small rivers and creeks in the project vicinity that support riparian and wetland vegetation. In the middle-ground the topography rises up to 1,000 feet above the canyon. To the west in the foreground the topography quickly rises over 1,000 feet above the roadway. Vegetation on the mountainsides consists of sparsely mixed sagebrush scrubland with patches of pine, aspen and cottonwood trees. Existing roadside cut-slopes are common. Some natural revegetation on

existing cut-slopes has occurred, however the plant density is thin due to solar exposure as well as wind and rainfall erosion (Figure 6).

Figure 6 - Existing roadside cut-slope in project limits with minimal to moderate vegetation coverage.

The visual quality of the U.S. 395 corridor is high. Views from the highway in the southern portion of the project area are limited to the fore and middle-ground due to local topography and the narrow Hot Creek and Little Walker River valleys. In the northern portion of the project limits closer to Sonora Junction, the landscape opens up and includes views of the eastern slopes and crest of the Sierra Nevada Mountain Range. The native vegetation within the viewshed is predominantly mature sagebrush shrublands with patches of pine groves and scattered willow, cottonwood and aspen trees where water is present. Hot Creek and Little Walker River have low to moderate coverage of riparian vegetation due to their perennial flows. The visual quality is slightly affected by a series of roadside cut-slopes predominantly to the north and east (northbound side) of the highway. Existing cut-slopes are somewhat revegetated due to slow plant establishment and slope steepness resulting in erosion.

There are few neighbors (residential properties or recreational facilities with views to the road) located within the project limits. Highway users (people with views from the road) would be the group most affected by the proposed project. On this section of U.S. 395, most highway users are comprised of regional or local residents, tourists, and interstate truck drivers. U.S. 395 is a key corridor between the Reno/Carson City area, the Eastern Sierra, and Southern California.

The existing visual character within the project limits is high. Views from U.S. 395 consist of a two-lane roadway that travels through a combination of narrow canyons and narrow to moderately sized valleys. The roadway regularly follows small creeks and rivers with naturally vegetated mountains rising up on both sides. The unity created between the highway and the surrounding landscape is also high. Intactness is moderately high due to the lack of visually

intrusive features in the landscape, although existing cut-slopes without full revegetation create a low to moderate impact to the overall visual character.

Environmental Consequences

The proposed project would widen and pave highway shoulders to four, eight, or a combination of four and eight feet wide. Improving sight distance by correcting curves as well as widening shoulders will require existing low to moderately vegetated cut slopes to be cut further from the road and recontoured. Slope stabilization measures proposed include placement of anchored wire mesh on the cut slopes. The wire mesh is intended to reduce soil erosion, keep rocks and debris from falling onto the roadway, and reduce the area of hill slopes which would need to be removed to achieve the highway widening. Guardrails throughout the corridor would need to be replaced with the current standard Midwestern Guardrail System (MGS). The MGS guardrails are visually similar to the existing guardrails, which they would replace, and the addition of new sections of guardrail would not cause impacts to visual resources as guardrail is a common highway feature both north and south of the project area. Retaining walls would be needed on the west (southbound side) of the highway to reduce impacts to Hot Creek and protect the roadway from water erosion. The abovementioned features vary in number, location and length per proposed project alternative. Alternatives 2 and 3 would correct the super-elevation of three curves as well as install a retaining wall to re-align Hot Creek at postmile 92.36. Installation of the wildlife crossings would be below the road grade and thus, not visible to the traveling public. If approved, the exclusionary wildlife fencing would be treated with Natina to help blend it into the surrounding landscape.

Figure 7 – Color treated Anchored Wire Mesh installed north of proposed project.

Alternative 1

Alternative 1 (four-foot shoulders throughout project limits) would require four retaining wall section to be built. Retaining walls are estimated to be approximately 440 feet long. No anchored wire mesh would be needed under Alternative 1 as the shoulder widening would not require cutting back roadside hills to accommodate the design. Please see Figure 3 for a map detailing the locations of this work.

Alternative 2

Alternative 2 would create four-foot paved shoulders on the southbound side of U.S. 395 from postmile 92.56-92.90 and create eight-foot paved shoulders on both the north and southbound sides of U.S. 395 for the rest of the project limits. This alternative would install fifteen retaining wall sections totaling approximately 2,405 linear feet. Alternative 2 would install five sections of anchored wire mesh on cut slopes to promote slope stability. Approximately 4,710 linear feet of guardrail would be installed or replaced under this alternative in nine sections. Please see Figure 4 for a map detailing the locations of this work.

Alternative 3

Alternative 3 would create eight-foot paved shoulders on both northbound and southbound sides of U.S. 395 throughout the project limits. Alternative 3 would construct the same sections of retaining walls, guardrail, and anchored wire mesh as Alternative 2. Please see Figure 5 for a map detailing the locations of this work.

The construction of project features under any of the Build Alternatives (Alternatives 1, 2, and 3) would not cause a significant impact to visual resources as the visual unity and intactness between the highway and surrounding landscape will remain moderately-high after construction. Impacts to visual/aesthetic resources are less than significant.

The removal of hillslope vegetation and the addition of anchored wire mesh will be somewhat noticeable by the traveling public. However, the existing hillslopes are only moderately revegetated currently and visual blending of the mesh into the surrounding scenery will be aided by color treatment of the mesh (VIS-1). The proposed contoured and rounded slopes are designed to mimic natural topography and may be an improvement from slopes which currently show signs of erosion and landslide activity. Metal beam guardrail and anchored wire mesh are common structures within the U.S. 395 corridor in Mono County and the traveling public is used to observing these features along the roadside. A majority of U.S. 395 throughout the Eastern Sierra region is well-maintained and built to current design standards with eight-foot shoulders and smoothly textured cut and fill slopes where the roadway interacts with the natural topography; therefore the addition of wider shoulders within the limits of this project would create a seamless roadside landscape as it would more closely match the eight-foot shoulder widths both north and south of the proposed project. Changes in visual quality would be moderate, and viewer response would remain high after the project is built.

Optional Wildlife Crossings and Exclusionary Wildlife Fencing

Similar to anchor wire mesh, new guardrail, and retaining walls, the introduction of exclusionary wildlife fencing could

Temporary Construction Impacts (all alternatives)

During construction, there would be temporary, less than significant, impacts to visual/aesthetic resources. Construction equipment would likely include road graders, pickup trucks, concrete trucks and backhoes, as well as traffic control and paving equipment. This equipment will be onsite temporarily during construction and will not have long term impacts to visual resources. Prior to revegetation efforts, bare soil will be visible by the traveling public; however, this impact is less than significant in magnitude and temporary in duration.

Avoidance, Minimization, and/or Mitigation Measures

The following measures have been proposed by the Caltrans Project Landscape Architect to further avoid and minimize any potential non-significant impacts to aesthetic/visual resources:

- VIS-1: Anchored wire mesh installed on cut slopes, metal beam guardrail, and retaining walls should be treated to match the color and all aesthetic treatments used on other projects in the vicinity. Color treatment, such as Natina, will also help anchor wire mesh and metal beam guardrail to visually blend in with the background soil and vegetation, thereby reducing its noticeability by drivers.

- VIS-2: Disturbed slopes will be revegetated with native plant species after construction has completed. This will reduce the time needed for vegetation to regrow on the slopes, help avoid propagation of invasive plant species, and reduce soil erosion from wind and rain.

- VIS-3: The tops of cut slopes will be contoured into a rounded shape where feasible to mimic natural topography.

- VIS-4: Existing vegetation will be preserved to the greatest extent feasible by tightening contours, cut slopes and retaining walls during the Design phase of the project. Disturbance or removal of existing vegetation will only occur when necessary to construct the project.

- VIS-5: Retaining walls and slopes near Hot Creek should be aesthetically treated and revegetated with riparian species to the greatest extent feasible. Opportunities will be developed by the Caltrans Project Landscape Architect.

If the option to install wildlife exclusionary fencing is approved and added to the project description, then the following measure would be added to avoid and minimize any impacts to aesthetic/visual resources:

- VIS-6: If wildlife exclusionary fencing is approved and added to the project description, the fencing should be color treated, such as with Natina, to blend the fence visually into the background vegetation and soils.

CULTURAL RESOURCES

Regulatory Setting

The term “cultural resources,” as used in this document, refers to the “built environment” (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance.

Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” 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 (NRHP). 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 (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA’s responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

The Archaeological Resources Protection Act (ARPA) applies when a project may involve archaeological resources located on federal or tribal land. The ARPA requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term “tribal cultural resources” to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way.

Affected Environment

Caltrans Professionally Qualified Staff (PQS) have completed and approved the required Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR) for the proposed project in August 2020. These studies were completed to ensure that the project undertaking is carried out in a manner consistent with Caltrans’ responsibilities under the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance*

with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA).

The HPSR and ASR document efforts to identify historic properties within the Area of Potential Effects (APE) using research methods including surface surveys, archival research, and consultation with local tribes and historical societies. The APE was established as the entire project footprint, including all ground-disturbing and Earthwork activities, and encompasses approximately 45 acres. The vertical APE extends from the ground surface to a depth of 5 feet; the maximum depth of excavation for the project.

Caltrans requested input from the following local tribes via written letters on October 17, 2018: Bridgeport Indian Colony, Washoe Tribe of California and Nevada, Big Pine Paiute Tribe, Utu Utu Gwaitu Tribe of Benton Paiute, Mono Lake Indian Community, and the Bishop Paiute Tribe. During a field visit on June 15, 2020, a member of the Bridgeport Indian Colony expressed concern regarding the project undertaking's potential effects to the creek, as the tribe actively fishes there. Follow-up calls were made to the remaining tribes on April 15, 2020. On April 21, 2020, a member of the Washoe Tribe emailed and asked to be kept updated if any cultural resources were found in the APE. No other responses were received. On June 24, 2020, Caltrans contacted the Eastern California Museum and the Mono County Historical Society for input; no responses were received.

Cultural resources pedestrian surveys resulted in the recordation of three built environment cultural resources within the APE; no archaeological resources were identified within the APE. Two of these resources, Burcham Flat Road (P-26-006215) and Little Walker Road (no "P" number) were exempt from evaluation as significantly altered structures per the PA. Three segments of the third resource, the Sonora Mono Wagon Road (P-26-005906), were originally mapped within the APE, however were determined upon further surveys to have been incorrectly recorded and actually not within the APE. Due to the first two resources being exempt per the PA and the third resource not occurring in the APE, there are no cultural resources present within the APE.

Pursuant to Stipulation IX.A.2 of the PA, a Finding of No Historic Properties Affected is appropriate for this project. The Section 106 process is now complete and no further Cultural Resource studies or analyses are needed.

Environmental Consequences

There are No Historic Properties Affected from the proposed project undertaking.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the Resident Engineer and Caltrans Project Archaeologist so that they may work with the MLD on the respectful

treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

Section 4(f) of the Department of Transportation Act of 1966 provides protection for historic properties. There are no historic properties present within the APE; therefore, there are no Section 4(f) historic sites affected by the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

There are no avoidance, minimization or mitigation measures proposed for the project at this time. If the project scope changes or if additional information about cultural resources in the project area is identified, the Caltrans Project Archaeologist will reassess the potential need for avoidance, minimization or mitigation measures.

Physical Environment

Climate Change

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 greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

HAZARDOUS WASTE/MATERIALS

Regulatory Setting

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

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA, often referred to as "Superfund," is to identify and cleanup 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:

- 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 (EO) 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 CA Health and Safety Code and is also 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 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

cleanup of 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. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Affected Environment

A Hazardous Waste clearance memo was completed by the Caltrans District 9 Environmental Engineer in August 2020. Historic records within the project area and regulatory agency databases for previous hazardous waste generators and disposal sites were reviewed. No previous source or repository for hazardous materials was identified within the proposed project limits. At this point no further hazardous waste assessments or reports are anticipated.

The project scope for all three Build Alternatives includes replacing guardrails as well as grading and general Earthwork to widen the highway shoulders. Guardrail posts are typically constructed of treated wood, which requires specific handling and disposal procedures. Removal and disposal of roadside surface soils could require testing for aerially deposited lead contamination due to historic use of leaded gasoline in vehicles. See “Environmental Consequences” below for more information.

Environmental Consequences

Treated wood waste from guardrail replacement is likely to require specific disposal requirements, which are outlined in Caltrans’ standard specifications.

Aerially deposited lead (ADL) from the historical use of leaded gasoline, exists along roadways throughout California. If encountered, soil with elevated concentrations of lead as a result of ADL on the state highway system right-of-way within the limits of the project will be managed under the July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances Control. This ADL Agreement allows such soils to be safely reused within the project limits as long as all requirements of the ADL Agreement are met.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures are proposed for all three Build Alternatives to avoid or reduce the potential less than significant impacts on the environment from hazardous materials:

- HAZ-1: Disposal of treated wood waste will follow Caltrans standard specifications and all State and County requirements.

- HAZ-2: If disposal of roadside soils is required, ADL testing will occur to confirm the presence or absence of lead contamination. If confirmed, soil disposal will adhere to all Caltrans standard specifications as well as State and County requirements.

Biological Environment

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 and habitat fragmentation. 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.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in the Threatened and Endangered Species section. Wetlands and other waters are also discussed below.

Affected Environment

A Natural Environment Study was prepared by the Caltrans project Biologist finalized in August 2020 and an addendum concerning optional project elements e.g., the two wildlife crossings and wildlife exclusionary fencing, was finished in December 2020. These studies incorporated the results of field surveys (entire study area 2018, 2019, 2020), reviews of pertinent literature, regulatory requirements, special-status species lists, and recorded occurrences of species, and a wetland delineation (Spring 2019). The Project Impact Area (PIA) includes areas which would be directly impacted by permanent or temporary project features proposed under all three Build alternatives, including proposed contractor staging areas.

The Biological Study Area (BSA) for this project includes all areas of permanent or temporary impacts for all Build alternatives (the PIA) including the optional wildlife crossing culverts and wildlife exclusionary fencing added to the project in December of 2020; this addition did not change the BSA as the BSA already incorporated an extra 50 feet beyond any potential impact in each direction so as to record any resources near the project, but not within the PIA. All habitat and species surveys were performed in the larger BSA boundaries.

Noxious Weeds

Per Executive Order (EO) 13112 (64 FR 6183), federal agencies are required to prevent the introduction and spread of invasive species, provide for their control, and minimize their economic, ecological, and human health impacts. Noxious weeds are a subset of invasive species that are identified by public law as exerting substantial negative, environmental, or economic impact. The U.S. Department of Agriculture (USDA) maintains the official federal list of noxious weeds (7 CFR 360.200; USDA 2011). In addition to the federal list, the California Department of Food and Agriculture (CDFA) maintains the list of official noxious weeds requiring control under the Noxious Weed Act of 1989 (CDFA 2010).

Permits through State agencies (CDFW, RWQCB) also typically require measures implemented to prevent the spread of invasive species to or from the PIA. Preventing the introduction of invasive plants into the PIA is the most cost-effective strategy in controlling the spread of these plants. Agencies at the federal, State, and County level have begun to establish and implement policies and practices to reduce the potential for the introduction and spread of invasive species.

According to the California Invasive Plant Council and California Invasive Plant Inventory Database, the following invasive plants have the potential to occur within the BSA. Of those, only Cheatgrass and Russian Thistle were observed in the BSA during field surveys.

Aquatic Resources: Wetlands, Streams, and Riparian Vegetation

There are U.S. Army Corps of Engineers (USACE) and California State-jurisdictional wetlands that occur within the BSA. These wetlands are described as Palustrine, Emergent with seasonally flooded persistent water features. In these wetlands, surface water is present for extended periods, especially early in the growing season, but then typically diminishes by the end of the growing season. The water table is variable, extending from saturated at the surface to a water table well below the ground surface.

There are several locations within the BSA and PIA where the stream Hot Creek is present. The water regime of this stream is classified as Riverine, Upper Perennial, Unconsolidated Bottom, and permanently flooded where water covers the substrate throughout the year in all years (Cowardin classification system). Hot Creek originates from Fales Hot Springs 1.3 miles east of the project limits. After paralleling U.S. 395 for the length of the project site, Hot Creek empties into the Little Walker River which travels north, following U.S. 395 into Topaz Lake. Hot Creek is considered a Water of the U.S. by the Army Corps of Engineers.

There are multiple locations within the BSA where riparian vegetation such as willow and wild rose is present and may need to be removed to construct the wider shoulders proposed for this project. The CA Department of Fish and Wildlife (CDFW) has jurisdiction over riparian vegetation associated with other jurisdictional features (i.e. streams), therefore the riparian vegetation which would be removed is likely under CDFW jurisdiction.

All of these resources, wetlands, streams (Hot Creek), and riparian vegetation are considered aquatic resources.

A delineation of wetland and non-wetland waters within the BSA was conducted in June 2019. All potential jurisdictional wetlands and waters present within the BSA were mapped in the field to determine their extent. The table below shows all delineated waters and wetlands within the BSA, including a total of 15 wetland features (approximate area 0.583 acre) and one non-wetland stream feature (Hot Creek). These are features present in the study area, not necessarily the features or areas which would be impacted by any Build alternative proposed for this project.

Table 2 - Aquatic resources (wetlands and streams) within the Biological Study Area..

Aquatic Resource/ Wetland Feature	Cowardin Classification Type	Acreage	Linear Feet (for stream channels only)
Hot Creek	R3UBH	1.744	6,009
W1	PEM1C	0.004	N/A
W2	PEM1C	0.0002	N/A
W3	PEM1C	0.014	N/A
W4	PEM1C	0.01	N/A
W5	PEM1C	0.103	N/A
W6	PEM1C	0.015	N/A
W7	PEM1C	0.004	N/A
W8	PEM1C	0.019	N/A
W9	PEM1C	0.02	N/A
W10	PEM1C	0.011	N/A
W11	PEM1C	0.042	N/A
W12	PEM1C	0.012	N/A
W13	PEM1C	0.274	N/A
W14	PEM1C	0.006	N/A
W15	PEM1C	0.049	N/A
TOTAL		**0.583**	**6,009**

Wildlife Corridors – Mule Deer

Rocky Mountain mule deer are one of six sub-species of mule deer that occur in northern Mono County, CA. Locally, their distributional range is from the Pine Nut Mountains near the CA-NV border south to Mono Lake. Mule deer are year-round residents or elevational migrants who move downslope in the winter months and upslope to higher elevations during the summer. The mule deer in the project vicinity migrate to Nevada during the winter and spend summers in California. Some deer from this population are known to migrate west of the Sierra Nevada Mountains in the summer months. During the summer, suitable habitat includes open montane and subalpine forests, mountain meadows, montane riparian woodlands and montane chaparral. In lower elevations during winter months, mule deer typically inhabit shrubby habitats such as sagebrush scrub and pinyon-juniper woodlands. The West Walker herd occupies the region of Mono County where this project is proposed and is estimated at 4,800 individuals (personal communication with CDFW staff).

The project area has been identified as an important movement corridor for this deer herd as they migrate between California and Nevada. During migration periods the herd crosses U.S. 395 within or near the project area at least twice annually, and deer mortality due to vehicle collisions occurs. The project area has been identified as a deer-vehicle collision hotspot in the Caltrans District 9 roadkill database. Within a 3-mile segment encompassing the project area (U.S. 395 postmiles 91-94) there have been 69 reported deer-vehicle collisions since 2002.

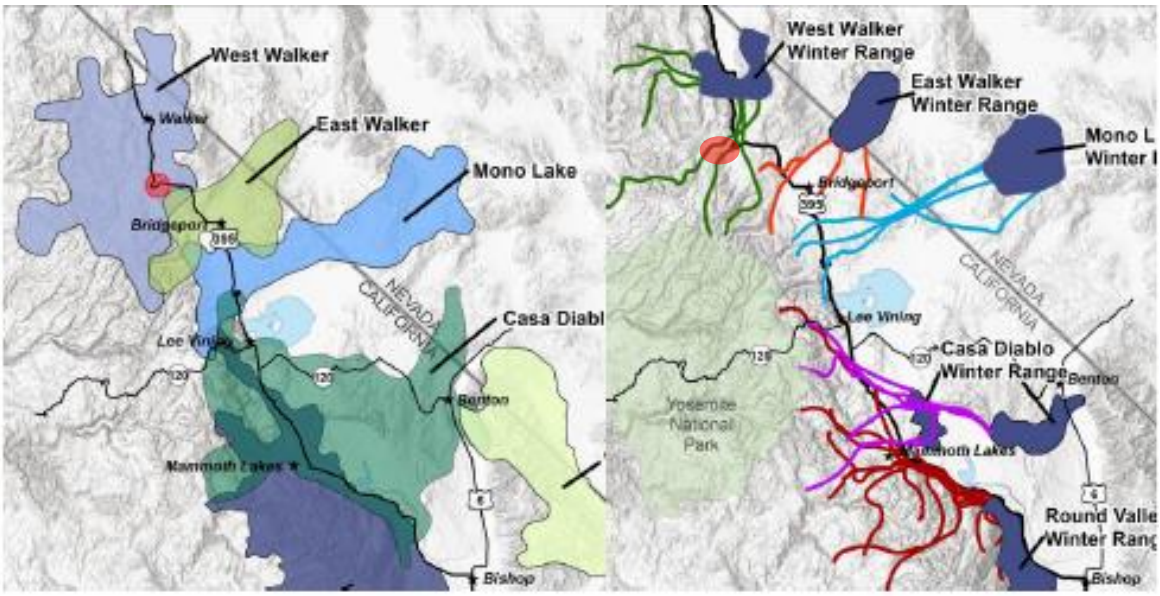


Figure 8 - Regional deer herds and migration routes (approximate project area shown by red circles)

A culvert currently exists at postmile 92.84 where Hot Creek crosses underneath US 395. The Caltrans project Biologist coordinated with local CDFW staff to discuss this project and place wildlife cameras at this location to see if deer are crossing the highway at this location. CDFW staff informed Caltrans that the West Walker herd has historically used this area during fall and spring migrations. The wildlife cameras recorded wildlife movements for 43 days between October and November 2019 and recorded 24 deer within the Caltrans right-of-way. All detections were either captured at night or during the hours of dawn and dusk. Due to the survey results it is believed that deer use this specific area to cross the highway and are likely to spend a significant portion of time browsing or bedding within close proximity to the highway.

Nesting Birds

According to the Migratory Bird Treaty Act (MBTA), it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; or to possess or sell migratory birds. The law also applies to live and dead birds and grants full protection to any bird parts including feathers, eggs and nests. The MBTA protects over 800 species of birds that occur in the U.S. The MBTA protects all species of nesting birds, and other more sensitive-status bird species may also be protected under CEQA and state and federal endangered species laws (e.g., CESA and FESA). Additionally, section 3503 of the California Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird.

No special-status bird species observed during field surveys, but there are several species that have the potential to occur within the BSA. There are no anticipated impacts to the listed bird species, however nesting birds can occur in the BSA or PIA prior to construction. Vegetation removal within the PIA may have ground or shrub-nesting birds present and any active nests would need to be avoided during construction. There are also many riparian willow thickets within the BSA which provide marginal nesting habitat. Active nests in these areas would need to be avoided during construction and if nests are outside the PIA, potential impacts from noise and human activity should be minimized. No large tree removal or rock scaling is anticipated for this project.

Environmental Consequences

Aquatic Resources: Wetlands, Streams, and Riparian Vegetation

After field delineation of the wetlands and riparian habitats within the BSA, the Caltrans project Biologist estimated the potential impact areas for each project Build alternative for these aquatic resources. Impact areas were estimated using preliminary engineering design information including the locations of cut and fill slopes, retaining wall locations and locations of Hot Creek realignment. Design information has not been completely finalized at this project stage therefore all impact areas cited here are approximate. Design will be completed after finalizing the environmental document, and accurate area calculations will be used for all resource impact permit applications required for the project.

It is currently assumed that all impacts to wetlands will be temporary, and the majority of impacts to streams, including Hot Creek, will be permanent. Permanent impacts will likely be a result of stream realignment while temporary impacts will occur from construction equipment access, vegetation removal, and installation/removal of water diversion equipment in the streambed.

Table 3 – Potential impact areas Wetlands & Streams (approximate) per alternative

Alternative	1	2	3	No-Build
Wetlands (acres)	0.0002	0.0002	0.0002	0
Streams (acres)	0.110	0.118	0.401	0
TOTAL	0.1102	0.1182	0.4012	0

The impacts listed in Table 3 above would result from activities such as widening the highway shoulders, diverting Hot Creek away from the edge of the roadway slope, and installing retaining walls. Impacts to wetlands are minimal for all three Build alternatives. Hot Creek, included under Streams in Table 3, would be diverted and therefore impacted under each Build alternative, with Alternative 3 requiring the largest diversion due to its installation of an 8-foot shoulder rather than a 4-foot shoulder at the location where Hot Creek intersects the new shoulder.

An estimated 0.27 to 0.63 acre of riparian vegetation could be temporarily impacted by the Build alternatives, again with Alternative 3 representing the largest impact area. Currently, riparian vegetation is growing within highway fill material on project area roadside slopes. The exact amount of vegetation which would need to be removed is estimated at this project phase. The exact amount will be determined with the regulatory agencies during the resource permit application and approval process.

Table 4 – Temporary impact areas per alternative (approximate)

Alternative	1	2	3	No-Build
Riparian Vegetation Impact Area (acres)	0.27	0.29	0.63	0

The impact amounts in Table 3 and 4 above include impacts from the installation of the optional wildlife crossing features. It should be noted that the wildlife crossing culvert at PM 91.59 would impact approximately 0.004 acre (~173 square feet) of riparian vegetation plantings within a current CDFW 1600 mitigation site. Please see the section of this document regarding habitat connectivity (below) for more information.

Wildlife Corridors – Mule Deer

The existing West Walker herd of Mule Deer migratory corridor is bisected by U.S. 395 and has been since the highway was built. The Build alternatives under consideration for this project will not add any vehicular capacity to the highway or induce increased traffic through the corridor, and therefore is unlikely to result in increased deer-vehicle collisions. Having wider shoulders will increase driver sight distances as well as provide additional room for vehicles to maneuver around wildlife in the roadway.

During construction activities, the noise and human presence on the roadway may result in temporary impacts to mule deer migration from April-June and September-November and would result in deer avoiding the project area or crossing the highway elsewhere. Construction activities are unlikely to be occurring during night, dawn or dusk, when the majority of deer were captured during the wildlife camera study. Traffic will be slowed during construction, which may reduce the number of collisions if deer do enter the roadway while work is ongoing.

Removal of roadside vegetation may temporarily reduce available forage for deer, however due to the availability of food sources in the general area, this reduction will not create any significant impacts for deer. Removal of this vegetation may instead serve to reduce deer-vehicle collisions by reducing an incentive for deer to enter the highway shoulders and by providing additional sight distance for drivers.

If approved, the optional wildlife crossings and exclusionary fencing would provide an opportunity to benefit to wildlife species, especially local populations of resident and migrating Mule Deer.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measure is proposed for all Build alternatives to avoid and/or minimize potential impacts from noxious weeds.

- BIO-1: The contractor must implement the following measures to avoid impacts from invasive species, such as noxious weeds:

- Wash all vehicles and heavy equipment, including tires and undercarriage, and hand-held tools, such as shovels and rakes, that have been used off-site with water heated over 100 degrees before bringing them onto the Project site;
- Vacuum and clean the interior of vehicles and heavy equipment that have been used off-site before bringing them onto the Project site;
- Clean by pressure washing, washing in hot water, freezing or bleaching personal gear and clothing, including footwear, that have been worn off-site before bringing them onto the Project site;
- Do not transport soil or other fill material from off-site locations to the PIA unless they are certified weed free; and
- Only use seeds and seedlings approved by the Caltrans biologist and landscape architect, when restoration is required.
- Prepare soils appropriately to encourage new seeds and plants to survive
- Contractor must submit a certificate describing the process used to clean equipment prior to on-site use.

The following avoidance and minimization measures are proposed for all Build alternatives and the optional wildlife crossing features to avoid and/or minimize temporary impacts to wetlands. These impacts are determined to be less than significant.

- BIO-2: Environmentally sensitive area (ESA) fencing will be installed between the construction area and wetlands, waters, and riparian vegetation outside of the project impact area (PIA).

- BIO-3: A full-time biological monitor will be onsite to monitor all construction activities in and around aquatic resources.

- BIO-4: All construction personnel on site will receive training prior to construction which will include locations of ESA fencing and other conditions required to avoid or minimize impacts to aquatic resources.

- WTR-1: All appropriate water pollution control Best Management Practices (BMPs) will be implemented prior to ground disturbance to avoid degradation of water quality from construction activities.

- WTR-2: The contractor will be required to prepare and submit for Caltrans approval a Stormwater Pollution Prevention Plan (SWPPP) which will outline the specific BMP types and placement locations to avoid water quality impacts.

The following mitigation measure is proposed for all Build alternatives to mitigate for permanent impacts to aquatic resources. With the following measure implemented, the impacts to aquatic resources will be less than significant.

- BIO-5: Purchase credits from a mitigation bank or pay into an in-lieu fee (ILF) program as mitigation for impacts to wetlands. Final credit amounts and ratios will be determined through coordination with regulatory agencies during the permit process.

The following avoidance and minimization measures are proposed for all Build alternatives to avoid and/or minimize potential impacts to nesting birds. These impacts are determined to be less than significant.

- BIO-6: Pre-construction nesting bird surveys will be conducted at least 48 hours prior to any work being done regardless of time of year as species nesting times vary within and outside of the normal nesting period. If nesting birds are found within the project area, the District Biologist will determine if work may be delayed or if a no work buffer will be placed around the nest.

WETLANDS AND OTHER WATERS

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. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. 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 U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. 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 Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] 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, EO 11990 states that a federal agency, such as FHWA and/or the Department, 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. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) 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 more details.

Affected Environment

A Natural Environment Study was completed in August 2020 and an addendum was completed in December 2020. Both studies included information about waters from a Wetland Delineation completed in July 2019. The study area for these reports included all areas of permanent and temporary impacts for each Build Alternative as well as a 50-foot buffer in all directions to identify any resources which may occur near but not within the project footprint. The results of the Wetland Delineation and consequent assessment of impacts are included in the preceding section “Wetlands and Riparian Habitats” and Table 2 and therefore are not repeated here but are incorporated by reference. There were fifteen wetland features and one stream (Hot Creek) identified within the study area. Hot Creek is considered a Water of the United States under the jurisdiction of the U.S. Army Corps of Engineers and a Water of the State under the jurisdiction of the Lahontan Regional Water Quality Control Board.

Environmental Consequences

Wetlands were identified within the project vicinity but are only expected to incur temporary impacts from equipment access when constructing road slopes, retaining walls and the creek diversion. Impacts to the stream (Hot Creek) would be permanent as all Build alternatives proposed to divert the creek where it currently approaches the highway and would undermine the widened highway shoulders and retaining walls. Impacts to Hot Creek increase from Alternative 1 to Alternative 3 as the shoulders would be widened further under

Alternative 3. As shown in Table 3 in the previous section of this document, approximate impacts to wetlands and streams per Alternative are as follows:

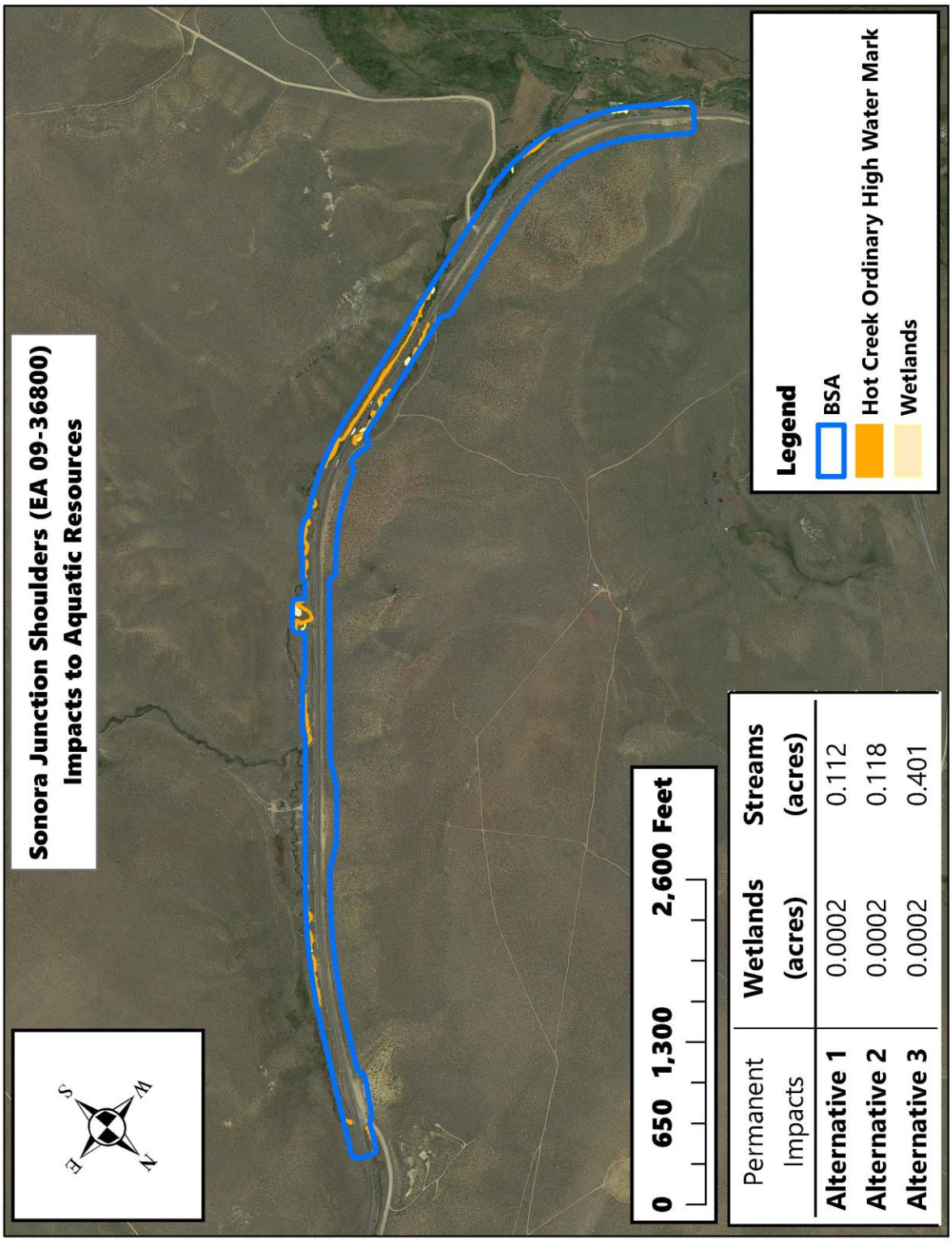
Alternative 1 – 0.0002 acre of temporary impacts to wetlands and 0.112 acre of impacts to Hot Creek

Alternative 2 – 0.0002 acre of temporary impacts to wetlands and 0.118 acre of impacts to Hot Creek

Alternative 3 – 0.0002 acre of temporary impacts to wetlands and 0.401 acre of impacts to Hot Creek

No-Build Alternative – No impacts to any wetlands or Hot Creek

The following figures show the locations of the wetlands and water resources in relation to the proposed project alternatives. Please note final design has not been completed and all boundaries of work are approximate. Final design and accurate impact boundaries will be determined after selection of a project alternative during the permit application process.



Permanent Impacts	Wetlands (acres)	Streams (acres)
Alternative 1	0.0002	0.112
Alternative 2	0.0002	0.118
Alternative 3	0.0002	0.401

Figure 9 - Potential impacts to water resources - project overview map (all sections)

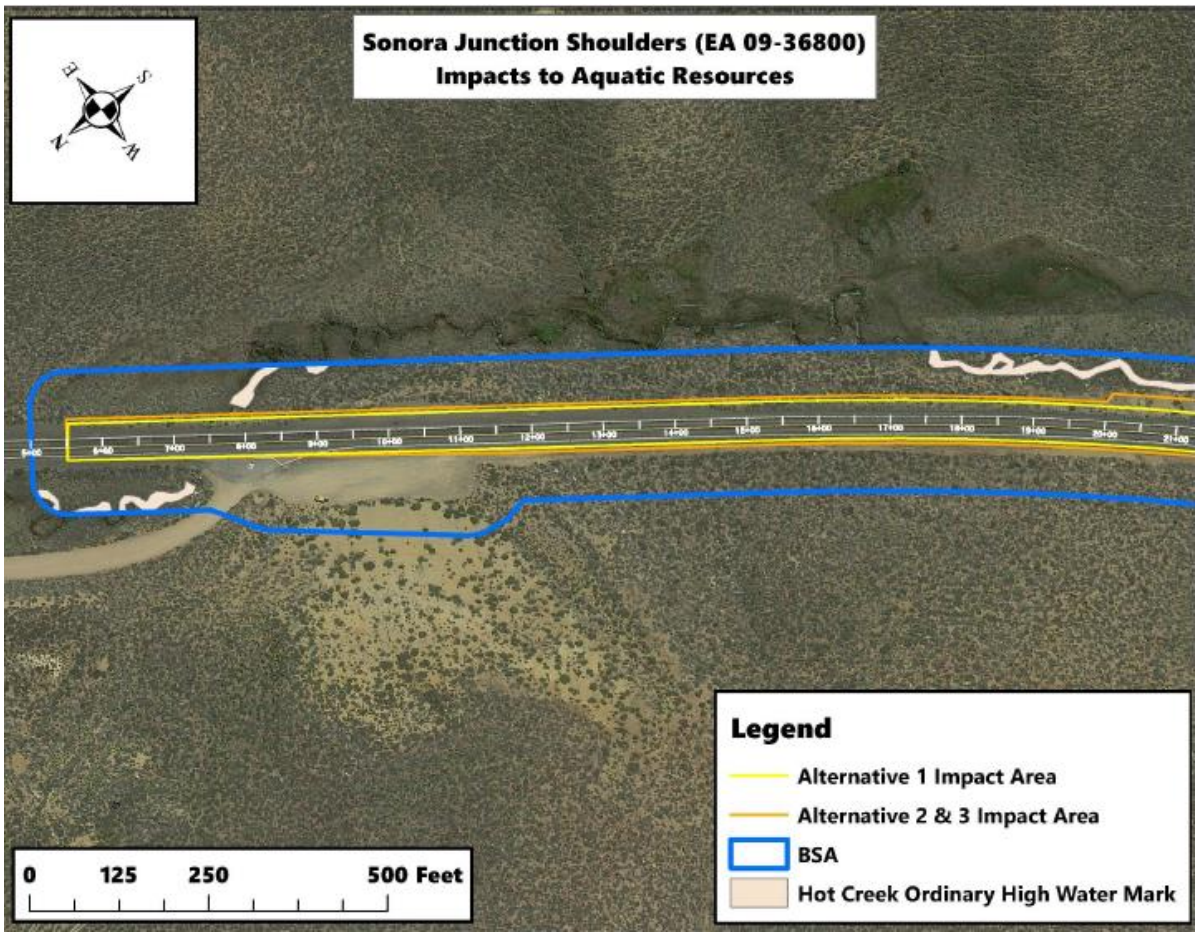


Figure 10 - Potential impacts to aquatic resources – Section map 1 of 7 (north to south); optional oversized wildlife culvert proposed approximately station 7+50 (PM 91.59)

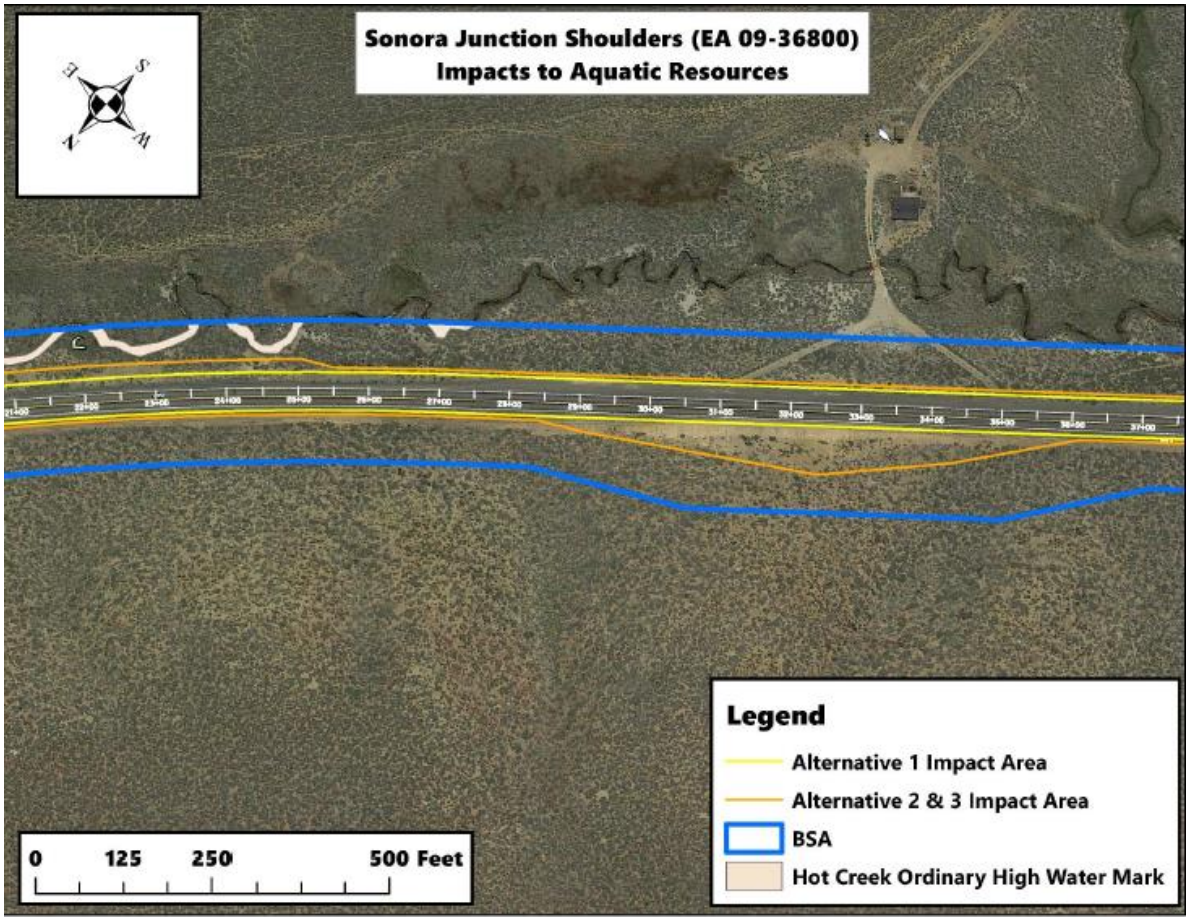


Figure 11 - Potential impacts to aquatic resources – Section map 2 of 7 (north to south)

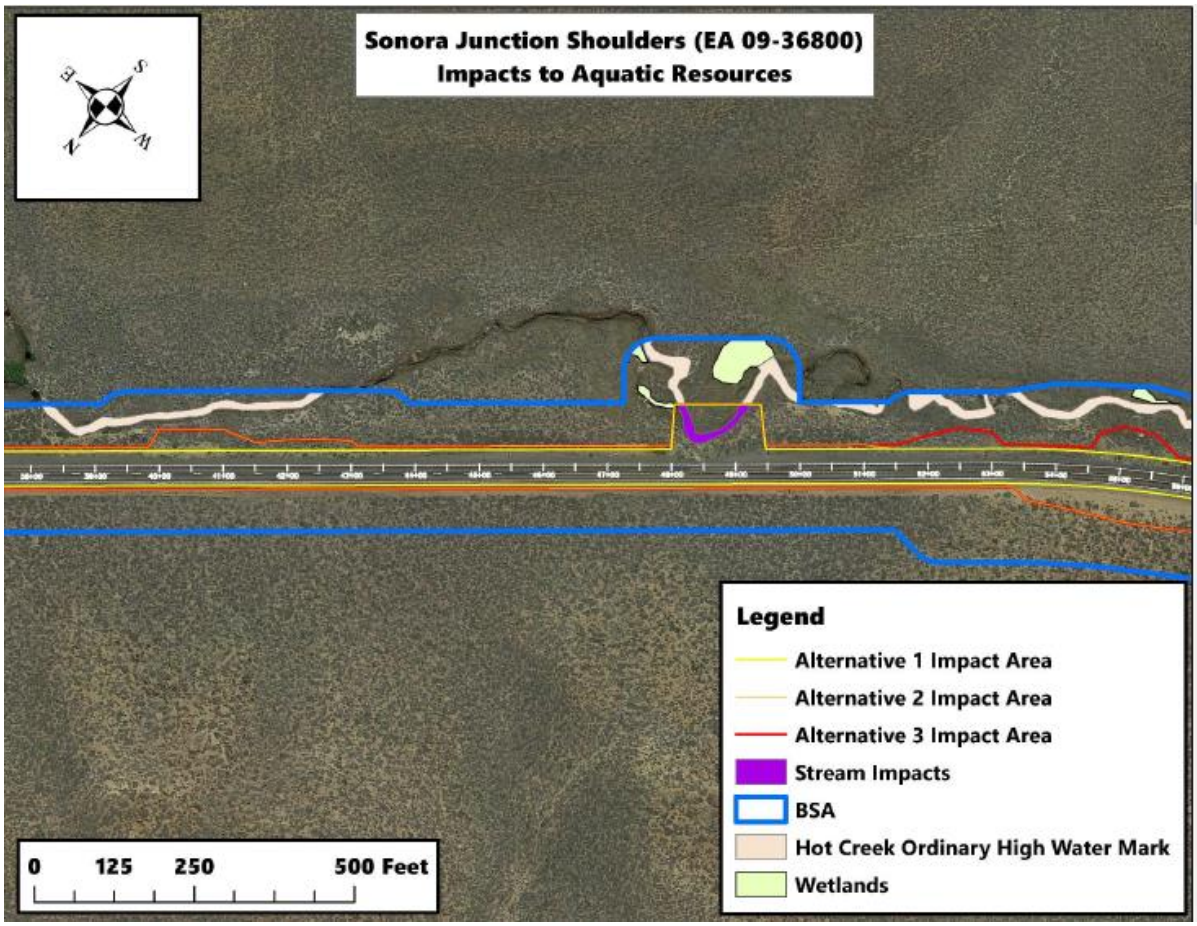


Figure 12 - Potential impacts to aquatic resources – Section map 3 of 7 (north to south); stream diversion in purple

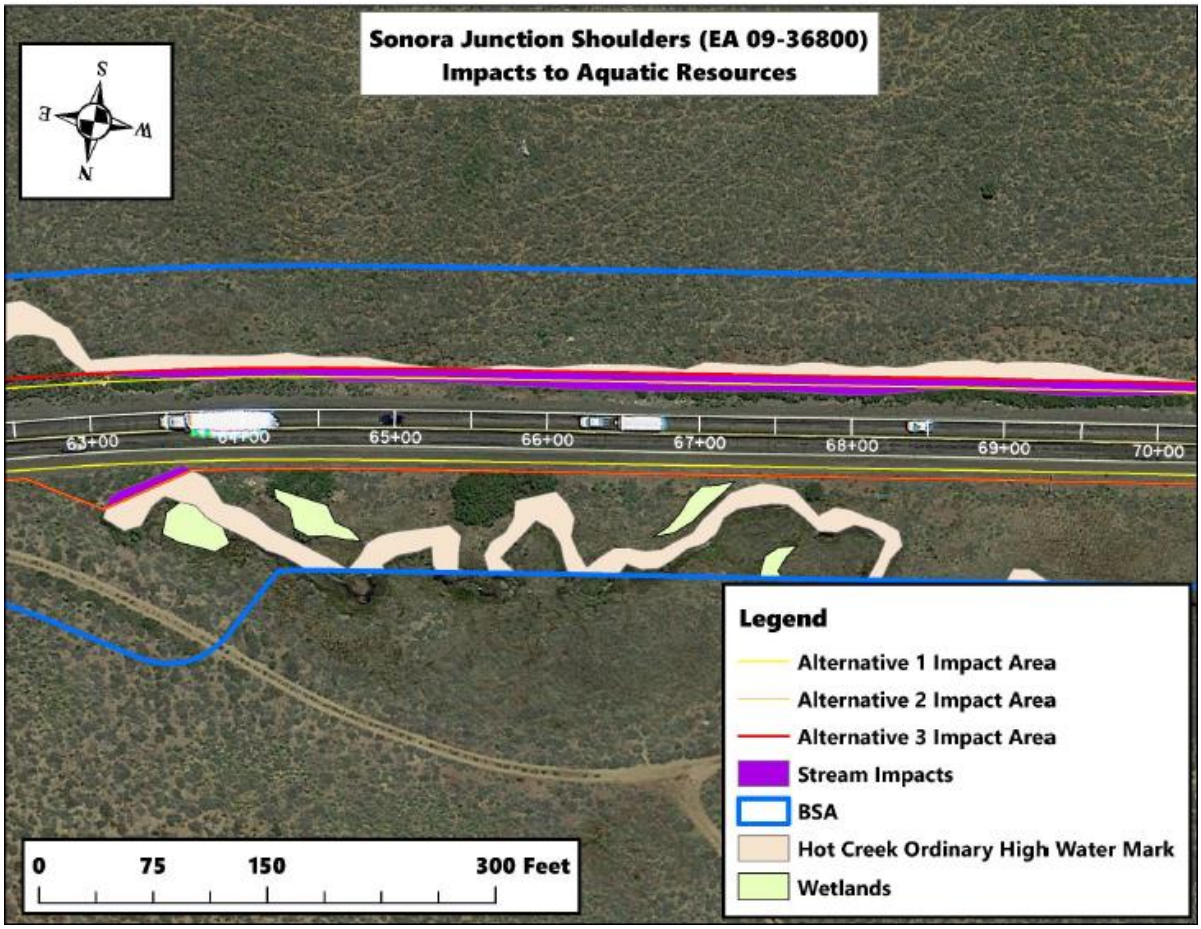


Figure 13 - Potential impacts to aquatic resources – Section map 4 of 7 (north to south)

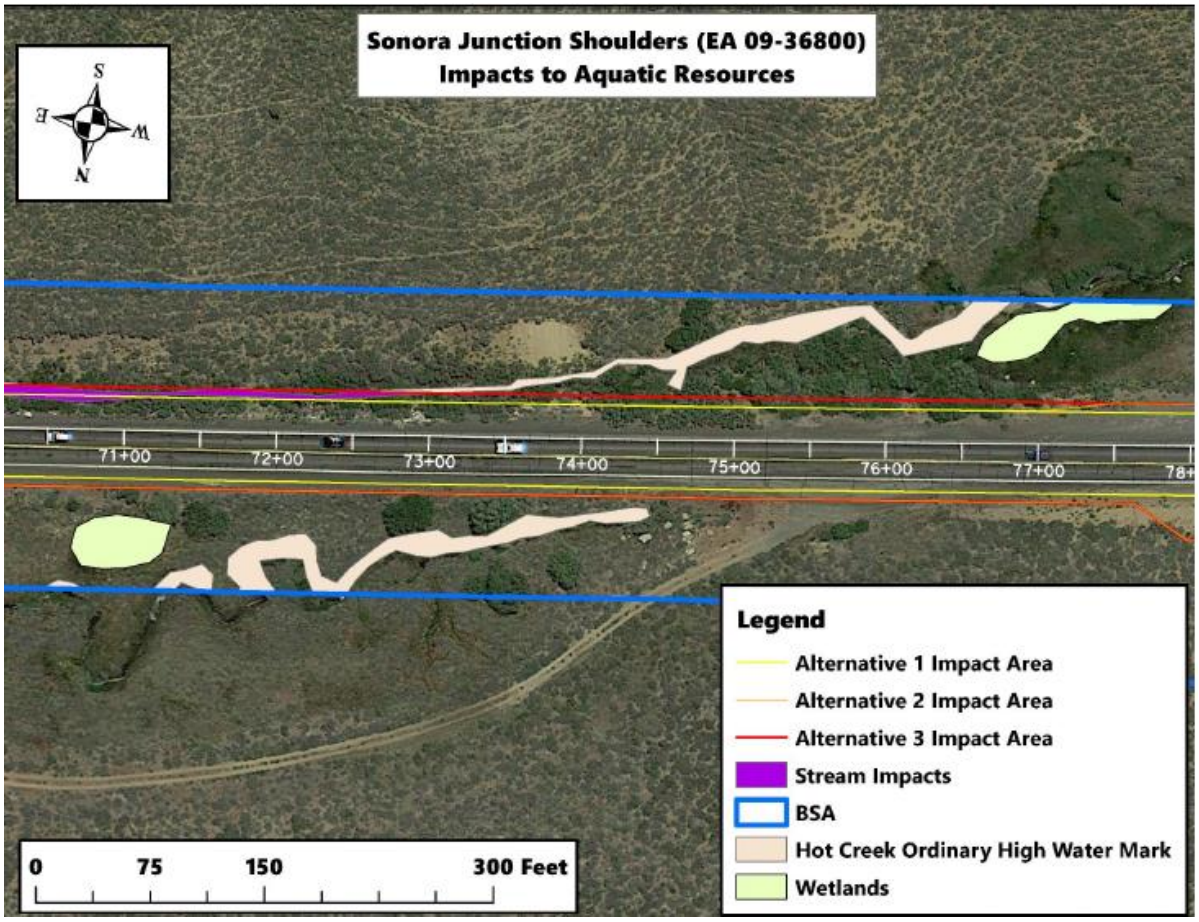


Figure 14 - Potential impacts to aquatic resources - Section map 5 of 7 (north to south); optional oversized wildlife culvert proposed approximately station 74+80 (PM 92.86)

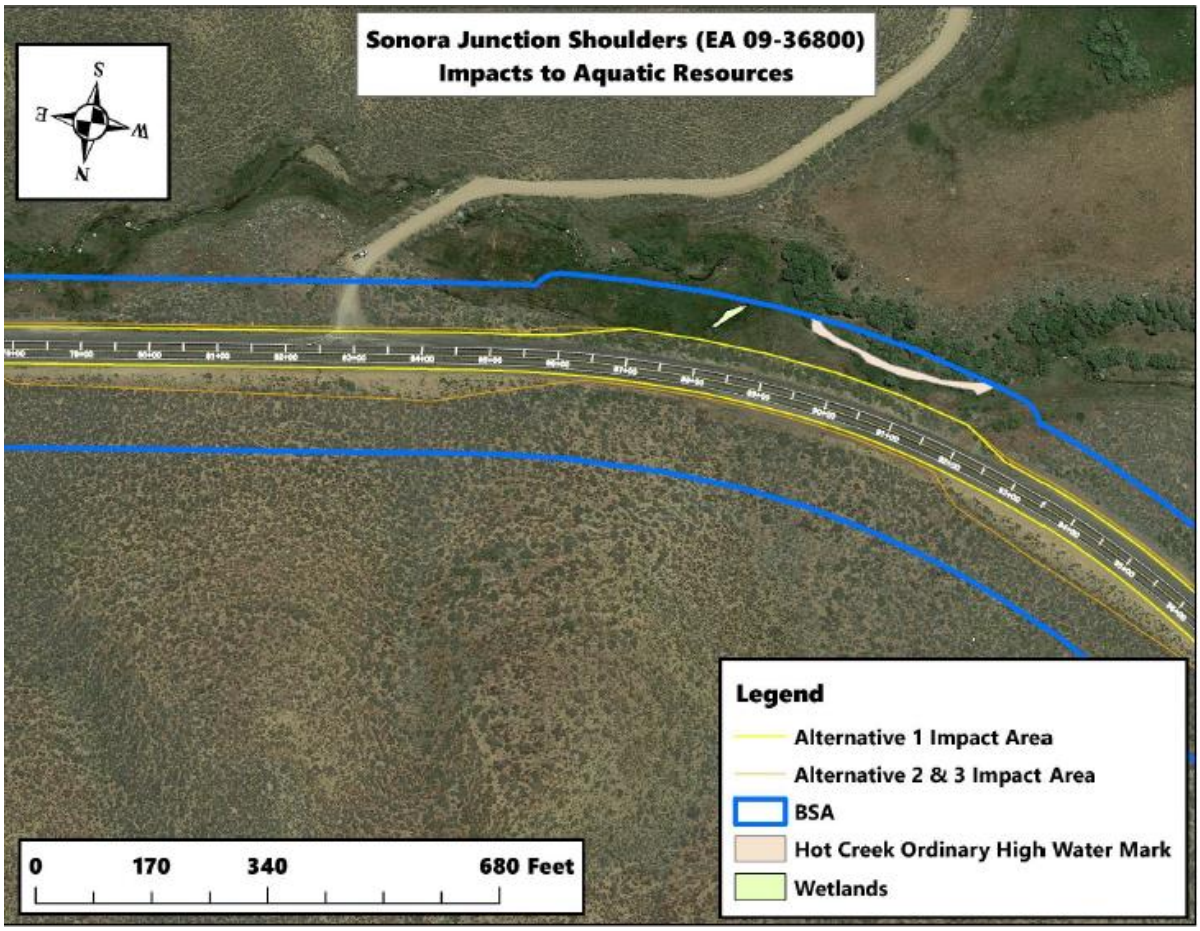


Figure 15 - Potential impacts to aquatic resources - Section map 6 of 7 (north to south)

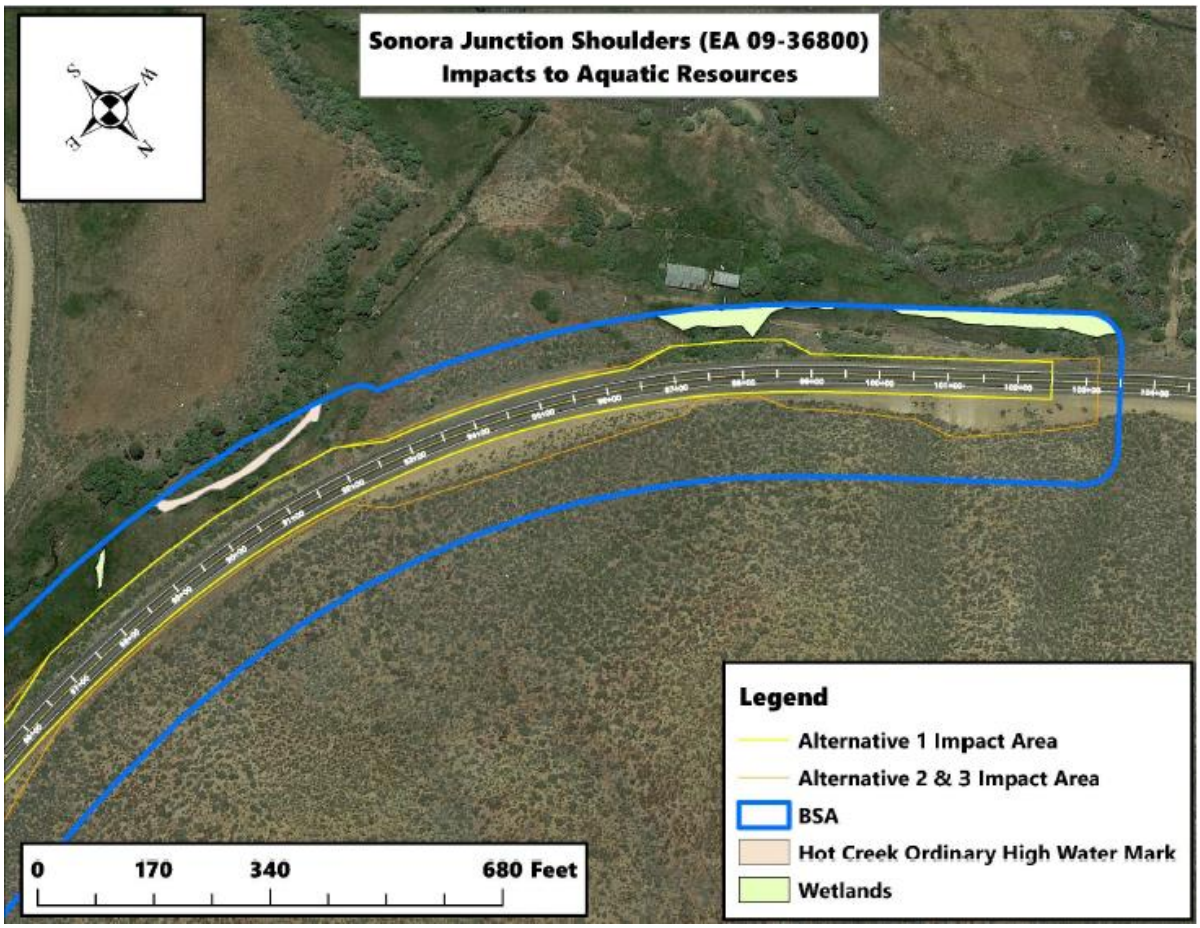


Figure 16 - Potential impacts to aquatic resources - Section map 7 of 7 (north to south)

Avoidance, Minimization, and/or Mitigation Measures

Measures proposed to protect wetlands and waters are the same as those previously described in the preceding section regarding riparian habitats and aquatic resources. These measures are restated below for convenience.

The following avoidance and minimization measures are proposed for all Build alternatives to avoid and/or minimize potential impacts to aquatic resources. These impacts are determined to be less than significant.

- BIO-2: Environmentally sensitive area (ESA) fencing will be installed between the construction area and wetlands, waters, and riparian vegetation outside of the project impact area (PIA).

- BIO-3: A full-time biological monitor will be onsite to monitor all construction activities in and around aquatic resources.

- BIO-4: All construction personnel on site will receive training prior to construction which will include locations of ESA fencing and other conditions required to avoid or minimize impacts to aquatic resources.

- WTR-1: All appropriate water pollution control Best Management Practices (BMPs) will be implemented prior to ground disturbance to avoid degradation of water quality from construction activities.

- WTR-2: The contractor will be required to prepare and submit for Caltrans approval a Stormwater Pollution Prevention Plan (SWPPP) which will outline the specific BMP types and placement locations to avoid water quality impacts.

The following mitigation measure is proposed for all Build alternatives to mitigate for permanent impacts to aquatic resources. With the following measure implemented, the impacts to aquatic resources will be less than significant.

- BIO-5: Purchase credits from a mitigation bank or pay into an in-lieu fee (ILF) program as mitigation for impacts to wetlands. Final credit amounts and ratios will be determined through coordination with regulatory agencies during the permit application process.

Chapter 3 – California Environmental Quality Act (CEQA) Evaluation

Determining Significance under CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

CEQA Environmental Checklist

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

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

CEQA Significance Determinations for Aesthetics

a,b,d) <u>No Impact</u>

The proposed project would have no impact on scenic vistas or resources as none exist in the project area. No construction materials will create new sources of substantial glare, and no new lighting is proposed on this project.

c) <u>Less Than Significant Impact</u>

- As discussed in the Visual/Aesthetics section in Chapter 2, the proposed project would have some impacts to the visual character of the area both during and after construction. During construction, heavy equipment and bare soil slopes will be visible by highway viewers. These conditions will be temporary as equipment will be removed after construction and bare slopes will be revegetated with native plants (commitment VIS-2). After construction has completed new visual elements including anchored wire mesh, guardrail, graded shoulders and retaining walls will be visible within the project area. These elements are common roadside features that already exist on US 395 both north and south of the proposed project. Treating metal features with Natina will also help blend those structures into the surrounding landscape. If exclusionary wildlife fencing is installed, it will also be treated with Natina to help blend it into the surrounding landscape. Therefore, the following measures proposed by the Caltrans Landscape Architect would minimize any less than significant impacts to visual/aesthetic resources:

- VIS-1: Anchored wire mesh installed on cut slopes, metal beam guardrail, and retaining walls should be treated to match the color and all aesthetic treatments used on other projects in the vicinity. Color treatment, such as Natina, will also help anchor wire mesh and metal beam guardrail to visually blend in with the background soil and vegetation, thereby reducing its noticeability by drivers.

- VIS-2: Disturbed slopes will be revegetated with native plant species after construction has completed. This will reduce the time needed for vegetation to regrow on the slopes, help avoid propagation of invasive plant species, and reduce soil erosion from wind and rain.

- VIS-3: The tops of cut slopes will be contoured into a rounded shape where feasible to mimic natural topography

- VIS-4: Existing vegetation will be preserved to the greatest extent feasible by tightening contours, cut slopes and retaining walls during the Design phase of the project. Disturbance or removal of existing vegetation will only occur when necessary to construct the project.

- VIS-5: Retaining walls and slopes near Hot Creek should be aesthetically treated and revegetated with riparian species to the greatest extent feasible. Opportunities will be developed by the Caltrans Project Landscape Architect.

- VIS-6: If wildlife exclusionary fencing is approved and added to the project description, the fencing should be color treated, such as with Natina, to blend the fence visually into the background vegetation and soils.

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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

CEQA Significance Determinations for Agriculture and Forest Resources

a-e) <u>No Impact</u>

The project scope does not include impacts or conversion of any lands designated as Prime or Unique Farmlands or any Farmlands of Statewide Importance, lands protected by the Williamson Act, or timberlands. Small easements of US Forest Service (USFS) property may be acquired to construct Alternatives 2 or 3, however no tree removal would occur and the land transfer would occur with coordination and approval of the USFS.

AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☐	☒

CEQA Significance Determinations for Air Quality

a-d) <u>No Impact</u>

The proposed project is located in the Great Basin Unified Air Pollution Control District and is in attainment for all State and Federal criteria pollutants except for State PM 10 (nonattainment). The project is set in a rural, sparsely inhabited area, and the scope of the project does not include activities that would produce significant PM10 or any other criteria pollutant during construction or after the project has been built.

BIOLOGICAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations for Biological Resources

a) No Impact

The proposed project would have No Effect on any species or habitat protected under the Federal Endangered Species Act. The project is located outside of NOAA Fisheries jurisdiction and therefore there will be No Effect to NOAA Fisheries species. No State-listed species occur within the proposed project limits, and no take of State-listed species is anticipated to occur during construction activities. Current species' lists can be found in Appendix H.

b) Less than Significant with Mitigation Incorporated

As proposed, all three Build Alternatives (Alternatives 1, 2, and 3) would temporarily impact wetlands and permanently impact riparian habitats and aquatic resources (Hot Creek). Diverting Hot Creek will result in permanent impacts to riparian habitat and water resources as the creek is diverted during construction and established into a new course. Impacts to Hot Creek and wetlands will require CDFW 1600, Army Corps of Engineers 404, and State Water Quality Control Board 401 permits. These permit applications will be submitted after an alternative is chosen and precise impact areas are calculated, and often include specific avoidance, minimization and/or mitigation measures. Until the specific mitigations are known, the following mitigation measure is proposed for all Build alternatives to mitigate for permanent impacts to riparian habitat and aquatic resources.

- BIO-5: Purchase credits from a mitigation bank or pay into an in-lieu fee (ILF) program as mitigation for impacts to wetlands. Final credit amounts and ratios will be determined through coordination with regulatory agencies during the permit process.

c) Less than Significant Impact

As proposed, all three Build Alternatives (Alternatives 1, 2, and 3) would temporarily impact wetlands. Wetlands will be avoided to the utmost degree feasible through the use of Environmentally Sensitive Area (ESA) fencing, which will constrain construction activities near the highway and away from wetlands which have been identified near the project area (but not within the project footprint). Some wetlands are anticipated to be temporarily impacted from construction equipment and personnel accessing the areas west of the highway to construct the widened shoulders, retaining walls, and creek diversion structures. The following measures are proposed for all three Build Alternatives to avoid or minimize less than significant impacts to riparian habitat and aquatic resources:

- BIO-2: Environmentally sensitive area (ESA) fencing will be installed between the construction area and wetlands, waters, and riparian vegetation outside of the project impact area (PIA).

- BIO-3: A full-time biological monitor will be onsite to monitor all construction activities in and around aquatic resources.

- BIO-4: All construction personnel on site will receive training prior to construction which will include locations of ESA fencing and other conditions required to avoid or minimize impacts to aquatic resources.

- WTR-1: All appropriate water pollution control Best Management Practices (BMPs) will be implemented prior to ground disturbance to avoid degradation of water quality from construction activities.

- WTR-2: The contractor will be required to prepare and submit for Caltrans approval a Stormwater Pollution Prevention Plan (SWPPP) which will outline the specific BMP types and placement locations to avoid water quality impacts.

d) Less Than Significant Impact

The project area lies within a migratory corridor for the West Walker herd of mule deer, which are known to cross US 395 in or near the project limits during their spring and fall east-west migration. US 395 has bisected this corridor since it was built, and the proposed build alternatives would not add vehicular capacity to the highway or induce additional travel, therefore traffic patterns are expected to remain consistent pre and post project construction. Wider shoulders and the removal of roadside vegetation will increase driver sight distances, deter deer from entering the shoulders to feed, and increase available area to maneuver around wildlife which may result in fewer deer-vehicle collisions, however this benefit cannot be quantified. During construction activities, human presence and noise from construction equipment may discourage deer from entering the highway corridor, however this condition will be temporary both daily (work hours restricted to daylight hours per County ordinances) and seasonally when weather conditions in northern Mono County often restrict construction to summer months. None of the proposed Build Alternatives or temporary construction activities would create additional barriers to migratory movement compared to the existing conditions and therefore would have a less than significant impact on wildlife movement in the project area. If the optional wildlife crossings and exclusionary fencing is approved, an opportunity to benefit wildlife movement in the project area would be added to the project.

e, f) No Impact

This project will not conflict with any local policies or ordinances protecting biological resources, or conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

CULTURAL RESOURCES

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

CEQA Significance Determinations for Cultural Resources

a-c) <u>No Impact</u>

As detailed in the Cultural Resources section in Chapter 2, there is a Finding of No Historic Properties Affected as no historic or archaeological resources occur within the project's area of potential effects (APE). Standard measures, which are included on all Caltrans projects, will also be implemented on this project to direct work stoppage and notification procedures in the event unexpected discoveries of resources or human remains occur during project construction.

ENERGY

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

CEQA Significance Determinations for Energy

a-b) No Impact

The project scope does not include excessive consumption of energy resources nor would it impair any plan considering renewable energy or energy efficiency. All build alternatives are highway shoulder widenings on an existing roadway.

GEOLOGY AND SOILS

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

CEQA Significance Determinations for Geology and Soils

a-f) <u>No Impact</u>

The proposed project does not occur on an earthquake fault A delineated by the Alquist-Priolo Act. No proposed construction activity IS expected to cause fault slippage or excessive ground vibrations which would result in liquefaction or landslides. Top soil alluvium in the project area is generally unconsolidated but it overlies consolidated rock units. The addition of anchored wire mesh on steep cut slopes would further minimize minor erosion of surface sediments. Soils in the project area are not expansive clays, no septic systems are part of the scope of the project, and no paleontological resources have previously been discovered in the project vicinity. Surficial geologic units in the project area are Quaternary alluvium, which is generally not conducive to the preservation of fossils.

GREENHOUSE GAS EMISSIONS

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

CEQA Significance Determinations for Greenhouse Gas Emissions

a-b) No Impact

The proposed project will temporarily generate greenhouse gas emissions from the use of construction equipment however all Caltrans standard emissions control specifications will be implemented. Post construction, the highway will not have additional vehicular capacity and long-term emissions will not be affected by constructing wider shoulders under any of the proposed alternatives. Efforts will be made to encourage the construction contractor to use the nearest material sources to reduce transportation distances and their associated emissions and fuel consumption. No applicable plan or policy will be violated by any of the build alternatives under consideration for this project.

HAZARDS AND HAZARDOUS MATERIALS

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

CEQA Significance Determinations for Hazards and Hazardous Materials

a) <u>Less than Significant Impact</u>

The proposed project may require the routine disposal of treated wood waste from existing guardrail posts. Any treated wood, which requires disposal will be handled and disposed of at the appropriate facility following all Caltrans standard procedures and State or County regulations. At this point in the project design process, it is not anticipated that roadside soils will be transported offsite for disposal however if this becomes necessary, testing for aerially deposited lead (ADL) will occur and soils will be handled and disposed of at an appropriate facility following all Caltrans standard procedures and State or County regulations. The following measures are proposed for all three Build Alternatives to avoid or minimize potential less than significant impacts to the environment from hazardous materials.

- HAZ-1: Disposal of treated wood waste will follow Caltrans standard specifications and all State and County requirements.

- HAZ-2: If disposal of roadside soils is required, ADL testing will occur to confirm the presence or absence of lead contamination. If confirmed, soil disposal will adhere to all Caltrans standard specifications as well as State and County requirements.

b-g) No Impact

The proposed project vicinity does not include any known areas of hazardous waste disposal, schools or airports, and the project scope does not include the use of hazardous materials to construct any alternative. Caltrans standard spill control BMPs will be implemented per standard procedures on all projects. Caltrans standard specifications for traffic control in construction areas will also be implemented to allow emergency vehicle access if needed. Work will be constrained to the roadway and adjacent slopes and is not expected to elevate the risk or impacts of wildland fires.

HYDROLOGY AND WATER QUALITY

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

CEQA Significance Determinations for Hydrology and Water Quality

a) Less than Significant Impact with Mitigation Incorporated

All three Build Alternatives proposed for this project would require permits to work in and around waters under the jurisdiction of CDFW, the U.S. Army Corps of Engineers, and the CA State Water Quality Control Board. These permits (1600, 404, and 401 respectively) will require avoidance, minimization and/or mitigation measures which are not known until after an alternative is chosen, final calculations of impact areas and the permits applications are submitted. Alternative 3 has slightly larger impact areas than Alternatives 1 or 2 due to its wider shoulders, however all three will require permits. Caltrans is currently proposing the following measures and environmental commitments for this project will be updated with any additional requirements of the regulatory agency permits when they are issued. All requirements of each

permit will be implemented and adhered to on this project. Diverted Hot Creek away from the highway shoulders will require constructing retaining walls and diverting running water into a new water course. Impacts to the waters from this action will be permanent and are likely to require the purchase of mitigation credits from a mitigation bank or an in-lieu fee program. The final amount of credits or fees will be prescribed by the State Water Quality Control Board during the 401 permit process.

The following measures are proposed for all three Build Alternatives to avoid or minimize less than significant impacts to water resources:

- BIO-2: Environmentally sensitive area (ESA) fencing will be installed between the construction area and wetlands, waters, and riparian vegetation outside of the project impact area (PIA).

- BIO-3: A full-time biological monitor will be onsite to monitor all construction activities in and around aquatic resources.

- BIO-4: All construction personnel on site will receive training prior to construction which will include locations of ESA fencing and other conditions required to avoid or minimize impacts to aquatic resources.

- WTR-1: All appropriate water pollution control Best Management Practices (BMPs) will be implemented prior to ground disturbance to avoid degradation of water quality from construction activities.

- WTR-2: The contractor will be required to prepare and submit for Caltrans approval a Stormwater Pollution Prevention Plan (SWPPP) which will outline the specific BMP types and placement locations to avoid water quality impacts.

The following mitigation measure is proposed for all Build alternatives to mitigate for permanent impacts to riparian habitat and aquatic resources. With the following measure implemented, the impacts to aquatic resources will be less than significant.

- BIO-5: Purchase credits from a mitigation bank or pay into an in-lieu fee (ILF) program as mitigation for impacts to wetlands. Final credit amounts and ratios will be determined through coordination with regulatory agencies during the permit process.

b) No Impact

The proposed project alternatives do not use or otherwise would affect groundwater supplies or future management.

c, d, e) Less than Significant Impact

The proposed project includes working within running waters and diverting Hot Creek. Standard measures are proposed to lessen erosion through the use of standardized Best Management Practices (BMPs) used on all Caltrans projects for stormwater and water quality control. Hot Creek will be redirected away from the highway shoulder slopes, but the hydraulic capacity of the creek should not change significantly and any impacts from the diversion during high water flows will be less than significant.

LAND USE AND PLANNING

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

CEQA Significance Determinations for Land Use and Planning

a-b) <u>No Impact</u>

The proposed project will not increase capacity on the highway and is not expected to directly or indirectly result in population growth in the area. No people or houses will be displaced by the project.

MINERAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

CEQA Significance Determinations for Mineral Resources

a and b) <u>No Impact</u>

No mineral resources of value to the region or to the residents of the state are have been identified within the project area.

NOISE

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two 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?	☐	☐	☐	☒

CEQA Significance Determinations for Noise

a-c) <u>No Impact</u>

The proposed project will not alter post-project noise levels from the existing level of highway noise. No vehicular capacity will be added to the highway from this project, and the rural setting of the project results in few, if any, local receptors to noise from this segment of the highway. Construction activities will result in short-term noise level increases, however there are no receptors nearby and construction activities will be limited to working hours per County ordinances.

POPULATION AND HOUSING

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

CEQA Significance Determinations for Population and Housing

a-b) <u>No Impact</u>

The proposed project will not induce substantial population growth as it is not a capacity-increasing project. It is compatible with the existing land use. It will not displace any people or residences.

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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

CEQA Significance Determinations for Public Services

a) <u>No Impact</u>

The proposed project is not capacity increasing and it t will not create new housing, so no impacts will occur to public services such as fire protection, police protection, or schools. No public parks are located in the project area. The proposed project is located on public lands owned and administrated by the Humboldt-Toiyabe National Forest (HTNF). Public access to these lands will be maintained during construction. The HTNF is a considered a cooperating agency and consultation and communication with them will be maintained throughout the life of the project. The wider shoulders would be a benefit to the delivery of emergency services by allowing vehicles to pull off the roadway safely in areas they could not do so before. The wider shoulders will also allow both the public and HTNF staff safer access to the surrounding public lands.

RECREATION

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

CEQA Significance Determinations for Recreation

a and b) <u>No Impact</u>

There are no neighborhood or regional parks within a mile of the project area. Access to Forest Service recreational facilities, such as campgrounds, trails and rivers, will be maintained during construction. The proposed project is not capacity increasing and will not induce substantial population growth; therefore, it is unlikely to increase use of parks or recreational facilities. This project does not involve the expansion or creation of new recreation facilities. After construction is complete, the wider shoulders would allow both the public and HTNF staff safer access to the surrounding public lands, for recreational use.

TRANSPORTATION

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

a) No Impact

The proposed project is listed in the Caltrans District 9, U.S. Highway 395 Transportation Concept Report (TCR), November 2014, as part of the long-term strategy to manage the corridor. The project is consistent with TCR strategies of widening shoulders where feasible, prioritizing safety projects, and accommodating all modes of transportation. The proposed project is also consistent with the 2019 Mono County Regional Transportation which calls for adding adequate shoulder widths on U.S. 395 to enable safe pedestrian and bike use, as well as increased motorist safety.

b) Less than Significant Impact

Per CEQA Guidelines section 15064.3, subdivision (b), transportation projects that reduce, or have no impact on vehicle miles traveled should be presumed to cause a less than significant transportation impact. The proposed project is neither capacity increasing nor a project that will lead to an increase in development or population. Based on 2018 Traffic Volumes and 2018 Annual Average Daily Truck Traffic (AADT) data, the assumed annual growth rate is 0.5%. Therefore, it will have a less than significant impact on vehicle miles traveled.

c-d) No Impact

The proposed project will not change street configurations or traffic patterns. The increased shoulder width will allow more space for larger vehicles, such as farm equipment or wide-load trailers, to remain safely in their lanes and not impact on-coming traffic. The project will increase sight distance and provide additional refuge for traveling vehicles to avoid hazards. It will not result in inadequate emergency access; it will instead provide additional shoulder width for emergency vehicles use.

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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒

CEQA Significance Determinations for Tribal Cultural Resources

a-b) <u>No Impact</u>

No resources listed on or eligible for the California Register of Historical Resources were identified within the project's APE (see chapter 2 for discussion). No Tribal Cultural Resources were identified as a result of background research or consultation efforts. No other cultural resources within the project area have been determined to be significant pursuant to PRC 5024.1.

UTILITIES AND SERVICE SYSTEMS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals??	☐	☐	☐	☒
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

CEQA Significance Determinations for Utilities and Service Systems

a-e) No Impact

This project involves highway improvements in a rural setting. It is non-capacity increasing and does not involve residential or commercial development. It will not require relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, or natural gas facilities. There is an underground fiber optic line (California Broadband Cooperative) located along the north shoulder of U.S. 395 at Burcham Flat Road. Based on existing information, it is unlikely there will be a conflict with this telecommunications line. Confirmation of utility locations will be performed, and any conflicts will be resolved prior to finalization of project plans. If any conflicts are identified, consultation with the telecommunications company will insure no interruption of service. There are no other anticipated utility conflicts. If water for dust control is required during construction, it will be obtained from an available source outside of project limits. The project will not produce solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure.

WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

CEQA Significance Determinations for Wildfire

a-d) No Impact

The CalFire Fire Hazard Severity Zone Map of Mono County, CA, shows the project area is in an area designated as “Other Moderate” (https://osfm.fire.ca.gov/media/6724/fhszl06_1_map26.pdf, 8/20/20). This designation covers the majority of Mono County, and no special fire hazard risks are present in or near the project area. Active running water is present in Hot Creek, which directly parallels the proposed project, further reducing wildfire risk. The proposed project’s scope, under any of the three build alternatives, would increase the width of the highway shoulders but would not increase the risk of wildfires by altering emergency response plans, use infrastructure which otherwise would be put towards controlling wildfires, or expose people to increased risks from fires or their effects. The additional shoulder widths may have a beneficial impact on emergency response as additional room will become available for response vehicles to safely pass stopped vehicles.

MANDATORY FINDINGS OF SIGNIFICANCE

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

CEQA Significance Determinations for Mandatory Findings of Significance

a)<u>Less Than Significant with Mitigation Incorporated</u>
All three Build alternatives will have both temporary and permanent impacts to waters and riparian vegetation. Mitigation for the permanent impacts will be in the form of purchasing credits from a mitigation bank or by paying into an in-lieu fee (ILF) program. This measure will reduce the impact to a less than significant level. The proposed project will either avoid and/or minimize all other impacts, including temporary impacts to waters, or have no impact, including no impact to animal species or cultural resources.

b)<u>No Impact</u>
This project will widen paved highway shoulders to fill in the gap between the north and south segments that have recently had shoulders widened to 8-feet. The proposed project is also consistent with the Mono County Regional Transportation plan 2019. The proposed project will create a safer and more seamless multi-modal highway setting, and no future projects which would cause cumulative effects are known at this time.

c)<u>No Impact</u>
Human health and well-being will not be affected by the proposed project, and any visual effects to the highway setting are being minimized to less than significant levels (see Chapter 2). The proposed project will not result in substantial adverse effects on human beings.

Climate Change

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 gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

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 in 1988 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 generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

REGULATORY SETTING

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

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 year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for 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 how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$).[1] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743**,** Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150**,** Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

[1] GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent" (CO_2e). The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

ENVIRONMENTAL SETTING

The proposed project is in a rural, sparsely populated area of Mono County surrounded by National Forest lands. The local economy is largely based on agricultural endeavors, such as cattle and sheep grazing, and tourism. U.S. 395 is the main transportation route to and through the area for both passenger and commercial vehicles. No other route is readily available; the closest alternative is SR 49, which is about ninety miles to the west, or U.S. 95 in Nevada, over 100 miles to the east. Traffic counts are low, with an average annual daily traffic count of 3,500 vehicles in 2018, 70.5% of which are trucks and 20.3% are other vehicles, mostly passenger cars. Congestion on this portion of U.S. 395 is rare.

The 2019 Mono County Transportation Plan guides current transportation development within the project area. This plan includes a Resource Efficiency Plan whose goal is to identify the most effective and appropriate GHG emissions reduction strategies. Policies and objectives included in the efficiency plan have been incorporated into the county transportation plan, addressing issues related to climate adaptation such as flooding, reduced snowpack (and water availability), economic issues, and biodiversity. These policies are also contained in the Mono County General Plan Land Use Element and Conservation/Open Space Element.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO_2, CH_4, N_2O, HFCs, perfluorocarbons, SF_6, and nitrogen trifluoride. It also accounts for emissions of CO_2 that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO_2 (carbon sequestration). The 1990–2016 inventory found that of 6,511 $MMTCO_2e$ GHG emissions in 2016, 81% consist of CO_2, 10% are CH_4, and 6% are N_2O; the balance consists of fluorinated gases (EPA 2018a). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.

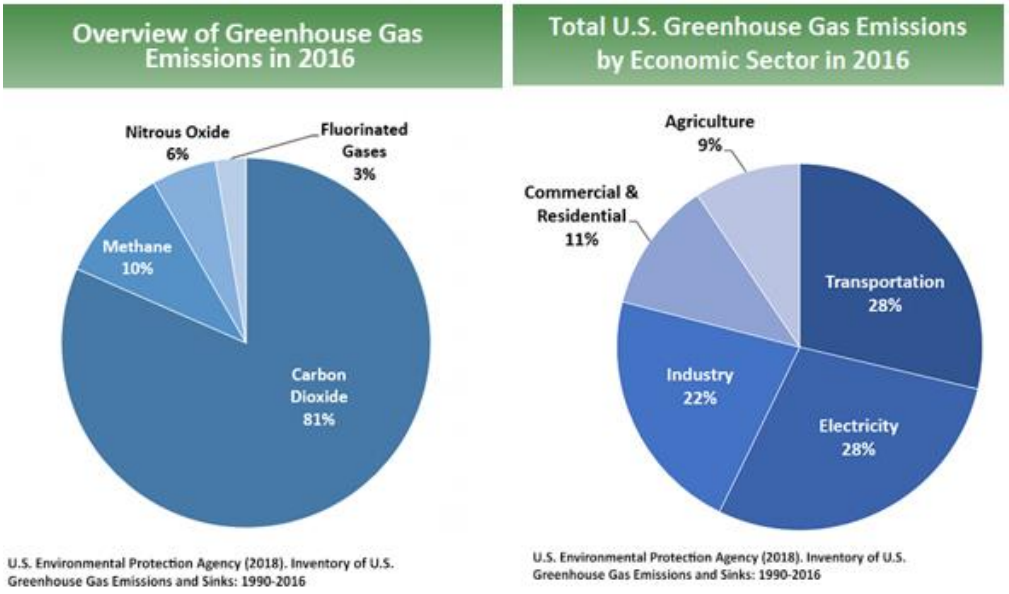


Figure 17 - U.S. 2016 Greenhouse Gas Emissions

State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 $MMTCO_2e$ for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (ARB 2019a).

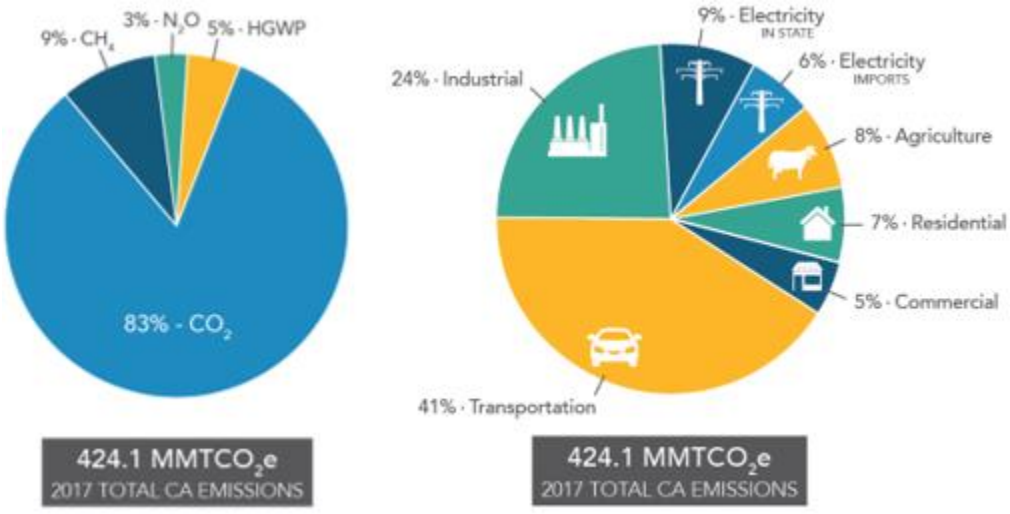


Figure 18 - California 2017 Greenhouse Gas Emissions

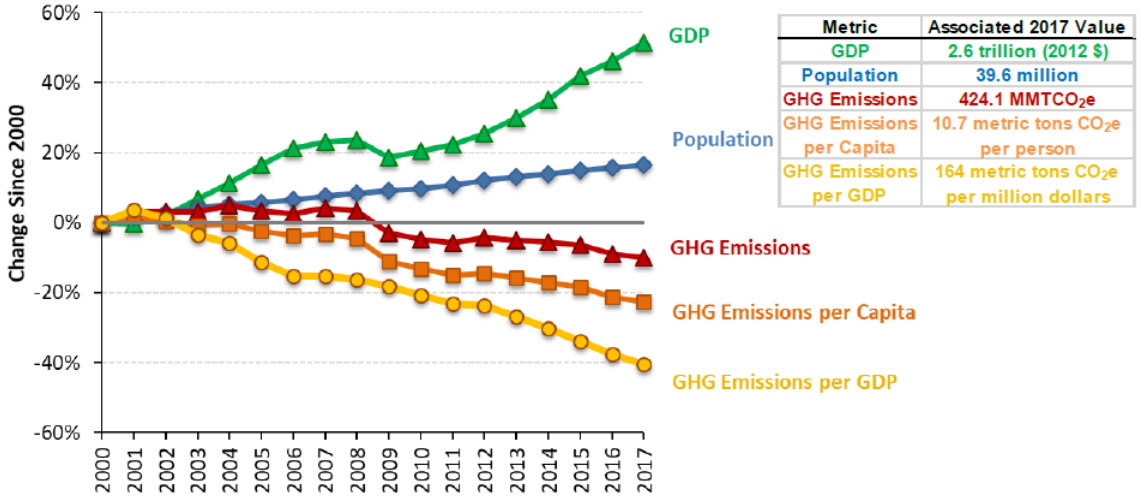


Figure 19 - Change in California GDP, Population, and GHG Emissions since 2000 (Source: ARB 2019b)

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for the Mono County Local Transportation Commission. There are no regional reduction targets for the Mono County Local Transportation Commission (ARB 2019c).

The proposed project is within the jurisdiction of the Mono County Regional Transportation Planning Agency (RTPA). The 2019 RTP identifies a Resource Efficiency Plan (REP) which serves as Mono County's response to meeting state requirements for a SCS and reducing greenhouse gas emissions. The REP includes: 1) a baseline GHG emissions inventory; 2) a GHG emissions forecast and reduction target; 3) policies and programs to achieve the adopted target; and 4) a monitoring program. Policies and objectives included in the REP have also been incorporated into the county transportation plan and the Mono County General Plan Land Use and Conservation/Open Space elements. The main policy of the REP is to reduce greenhouse gas (GHG) emissions through local land use and development decisions, and collaborate with local, state, and regional organizations to promote sustainable development. Because the proposed project is non-capacity increasing and instead focused on improving travel safety and accessibility, the proposed project would not increase GHG emissions nor conflict with REP policies.

Additionally, the proposed project is consistent with the 2019 Mono County RTP, which includes needs, goals and actions for the provision of wider shoulders for bike and other uses as a component of rehabilitation and maintenance projects on streets and highways and

acknowledges that adding adequate shoulder during projects enables safe pedestrian and bike use; increases motorist safety; and improves system safety and maintenance Project Analysis.

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

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

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

Operational Emissions

The purpose of the proposed project is to is to reduce accidents, enhance safety, and make the road accessible to all modes of transportation by accommodating bicycles and pedestrians. This project is needed because the existing shoulders and pavement super elevation do not meet current standards. It will meet this purpose and need by widening shoulders, installing rumble strips, and implementing slope protections. It would not increase travel capacity through the area; it would only make it safer. Therefore, because the project would not increase the number of travel lanes on U.S. 395, no increase in vehicle miles traveled (VMT) would occur as result of project implementation. No capacity improvements are programmed for this segment of U.S. 395 in Mono County per the 2019 Mono County RTP.

While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

The proposed project involves soils acquisition from a materials site as well as cut and fill activities. Caltrans' Standard Specifications pertaining to dust control and dust palliative requirements are also a required part of all construction contracts. This includes Caltrans' Standard Specifications, Section 14-9.02 "Air Pollution Control" and Section 14.9.03 "Dust Control," which require contractor compliance to the Great Basin Unified Air Pollution Control District's rules, ordinances, and regulations. The enforcement of these measures should effectively reduce and control emission impacts during construction.

CEQA Conclusion

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

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

GREENHOUSE GAS REDUCTION STRATEGIES

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

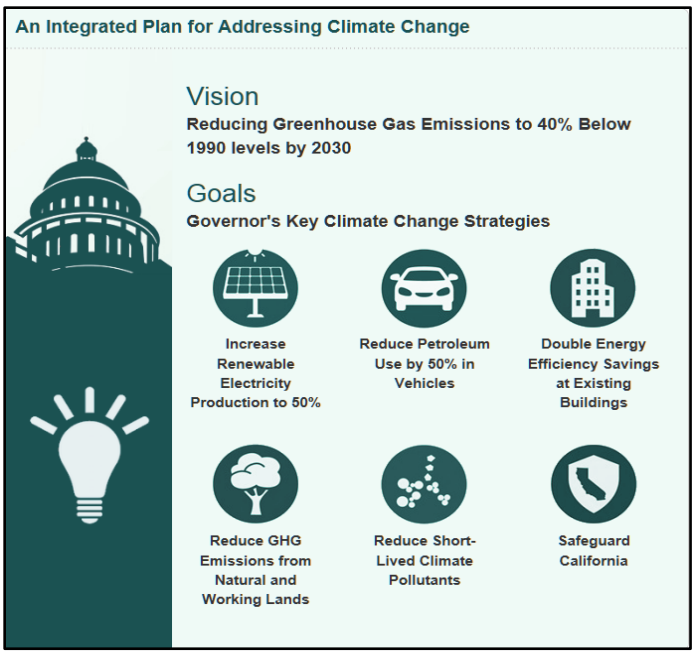


Figure 20 - California Climate Strategy

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Caltrans Activities

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

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO_2 reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of

roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

CALTRANS STRATEGIC MANAGEMENT PLAN

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

FUNDING AND TECHNICAL ASSISTANCE PROGRAMS

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

CALTRANS POLICY DIRECTIVES AND OTHER INITIATIVES

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

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

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

- Idling is limited to 5 minutes for delivery and dump trucks and other diesel-powered equipment (with some exceptions)

- Construction scheduling: Lengthen Lane closure duration to reduce necessary mobilization efforts.

ADAPTATION

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must 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 their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

CALTRANS VULNERABILITY ASSESSMENTS

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Analysis

CEQA does not require analysis of effects of climate change on a project, however, as stated above, Caltrans is making a concerted effort to identify the potential climate change vulnerabilities of the State Highway System and its assets such as maintenance stations. As such, this project will be assessed for its vulnerability to climate change and ability to exacerbate climate change.

The proposed project is located in Caltrans District 9 on a section of U.S. 395 that travels through the Sierra Nevada. The geographic and climatic conditions of the District create special challenges with respect to extreme weather events and long-term climate change. According to the District 9 System Management Plan, "seasonal weather variations and related natural events/disasters impact the District’s highways including subzero temperatures, heavy snowfall, ice, avalanche, high winds, blinding dust, wildfire, excessive summer heat, flash floods, and washouts. Geographical constraints (e.g., cliffs and rivers) and sensitive flora/fauna species are also challenging to the planning, designing, building, and maintaining of highways in the district” (Caltrans District 9 2015).

A recent Forest Service study of the Sierra Nevada concluded that temperatures in the Sierra Nevada are expected to increase “between 3-6°C over the next 50 to 80 years,”. This same report predicted that by late 21st Century, the Sierra Nevada range could experience:

- Decreasing annual precipitation in the form of snow, resulting in significant loss of snowpack
- Increasing temperatures that drive increasing dry season soil moisture stress.
- Higher fractions of the total amount of annual precipitation occurring in fewer storm events (i.e. more intense storms and flooding).
- Increased frequency of drought

Specifically, the increased frequency of drought, could be the most damaging aspect for the Sierra Nevada, as it could amplify fire frequency and magnitude as well as insect infestations and disease in its forests. Deforestation could then lead to decreases in soil stabilization and an increase in landslide potential during heavy rains and avalanches during heavy snows or melts.

As part of a statewide effort to reduce GHGs, District 9 completed the *Caltrans Climate Change Vulnerability Assessment Summary Report District 9* and associated technical report in 2019. Review of this assessment and report indicates that the project area is vulnerable to several climate stressors: temperature rise, precipitation, and wildfire.

SEA LEVEL RISE

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

TEMPERATURE RISE

Projections documented in the District 9 Vulnerability Assessment indicate the project location should expect to see up to a 6 to 7 degree rise in temperature from current conditions by 2055 and an 8 to 10 degree rise by 2085. This rise could affect the longevity of the asphalt pavement present in the project area which is currently predicted to last at least 20 years or more. To mitigate for this, the District should continue its efforts to monitor, document, and analyze pavement performance under normal and extreme conditions, as well as continue to provide regular repair to the roadway and the shoulders.

FLOODPLAINS

The District 9 Vulnerability Assessment found that a positive increase in 100-year storm depth is likely throughout District 9. This finding indicates that heavier rainfall than normal is expected to occur in shorter intervals during storm events instead of being dispersed throughout the rainy season.

The proposed project is located in an area that has steep slopes and generally unconsolidated soils which overlie consolidated rock units. Such conditions could increase the opportunity for soil saturation, landslides, and creek bank erosion during heavy storm events. Stabilizing slope cuts, flattening side slopes, and installation of chain-mesh slope protection should help decrease the likelihood of such failures within project limits. The addition of anchored wire mesh on cut slopes would further minimize any potential minor erosion of surface sediments and enhance the safety of the clear recovery zone. Realigning the creek and reconstructing the

roadway side-slope will help prevent further erosion or undermining of the roadway during storm events as well.

Further, even though a section of Hot Creek may be realigned, the hydraulic capacity of waterways within the project limits will not be altered by the project. Existing drainages are designed to convey flows appropriately and will be extended to maintain their functionality under the new shoulder widths. The option of a deer crossing at the point where Hot Creek passes under the highway, would provide opportunity for overflow waters to be channeled away from and under the highway into the existing creek channel. Overall, the project would protect and stabilize slopes, including the creek bank. It will not significantly alter drainage patterns or decrease the ability of existing systems to convey floodwaters.

WILDFIRE

The project area is not located within a State Responsibility Area of Very High Fire Hazard Severity. Project implementation would not alter the existing hazard zone rating.

Per the District 9 Vulnerability Assessment, the more-densely forested areas in the northern portion of the district have the highest wildfire risk, with the greatest occurring in Mono County's Inyo National Forest. The proposed project is located outside of the Inyo National Forest, it is located within the Humboldt-Toiyabe National Forest, and is surrounded by grassy meadows, steep slopes, and riparian vegetation close to the highway. The District 9 Vulnerability Assessment also finds that the project area will have an high level of wildfire concern by 2055, and a very high level of concern by 2085 (Caltrans 2019). District 9 can mitigate wildfire risk to its assets in these locations by using fire-resistant materials, such as paving shoulders and using metal fencing, both of which would be applied as a part of the proposed project. Additional preventable measures include maintaining defensible space for district assets by continuing to actively reduce fuel through dead or diseased tree removal, vegetation thinning practices, and coordinating with/supporting partner agencies such as CalFire and the US Forest Service.

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Chapter 4 – Comments and Coordination

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

PUBLIC SCOPING MEETING

Caltrans District 9 held a public scoping meeting at the Bridgeport Memorial Hall in Bridgeport, Mono County, California on November 15, 2018. Two weeks prior to that date, a fact-sheet announcement detailing the time, location, and agenda of the public scoping meeting was circulated. It was included in the local newspapers, on the District website, and posted at various frequently visited public places within the project vicinity, such as the Lee Vining Mobil Station on S.R. 120, Mono Market in Lee Vining, and at the Bridgeport post office, library, and sheriff/'s station. On November 6, 2018, Jorge Mead, a local landowner, asked if we could send him any updated maps we produce for the public scoping meeting as he will not be able to attend. Mr. Mead owns property off-of Burcham Flat Road and stated that he was interested in the Sonora Junction Shoulder project. The requested information was provided to Mr. Mead shortly thereafter via the email address he provided. No other requests or comments were received from the public prior to the public scoping meeting date.

On November 15, 2018, the public scoping meeting was held from 6:00 to 8:00 pm at the Bridgeport Memorial Hall. Eight members of the public and one member of Mono County Local Transportation Commission (LTC) attended the meeting. Only two comments were received at the meeting; one concerned the Virginia Creek Shoulders project its potential impact to business, facilities, and well belonging to the Virginia Creek Inn. The other comment was regarding the addition another lane on southbound U.S. 395 just north of Bridgeport; this second comment bore no relation to any of the projects discussed at the meeting. No comments were received regarding Sonora Junction Shoulders as a result of the public scoping meeting.

NATIVE AMERICAN CONSULTATION

Caltrans contacted the Native American Heritage Commission on September 25, 2018, requesting contact information for local Native American tribes and a search of their Sacred Lands File. No response was received. Caltrans then contacted Native American parties and individuals who had previously requested consultation under AB 52 and others whose names were provided by the NAHC on previous projects in the vicinity. The following tribes were then contacted on October 17, 2018, requesting consultation under AB 52 and Section 106: Bridgeport Indian Colony; Washoe Tribe of California and Nevada; Big Pine Paiute Tribe; Utu Utu Gwaitu Tribe of Benton Paiute; Mono Lake Indian Community; and Bishop Paiute Tribe. A representative from the Bridgeport Indian Colony responded on December 3, 2018, citing concern for project impacts to the creek and to the local deer population. He requested additional maps and information, which was provided on January 22, 2019.

Caltrans followed up with the above-named tribes on April 15, 2020, via email. A representative of the Washoe Tribe of California and Nevada responded on April 21, 2020, stating he has no knowledge of heritage resources in the APE but wishes to be kept informed if cultural resources are discovered. A representative of the Bridgeport Indian Colony responded on June 6, 2020 and arranged a field visit with Caltrans. During the field visit on June 15, 2020, the tribal representative again expressed concern regarding the proposed project's potential effects to the creek, as the tribe actively fishes there. He was informed of standard measures taken to protect creek waters during projects. No other responses were received at that time.

Caltrans followed up via phone and email with the above-named tribes on December 15, 2020, to inform them of the proposed optional project feature of wildlife undercrossings and fencing. Project information and maps were sent via email. The same day, a representative of the Washoe Tribe of California and Nevada responded stating that he had no concerns with the additional scope or the project in general. He requested information about the undercrossing design, which was sent. No other responses have been received to date.

HUMBOLDT-TOIYABE NATIONAL FOREST

The Humboldt-Toiyabe National Forest (HTNF) was notified of the proposed project on December 28, 2017. Follow-up with HTNF staff was conducted on January 5, 2021. Just prior to the follow-up consultation, consultation with HTNF Bridgeport District Biologist, Anne Orlando, was conducted at the proposed project site to solicit input and to discuss the logistics of the wildlife connectivity options. The wildlife connectivity options were positively received by both CDFW and HTNF staff. A response was received on the same day from Marnie Bonesteel, Lands Special Use Administrator for the HTNF requesting the name of the District Right of Way agent assigned to the project. That information was obtained and sent to Ms. Bonesteel. Additional consultation with Aaron Coogan, HTNF grazing permit coordinator is also occurring in order to make sure ranchers are made aware of the project, its schedule, and potential for new taller fencing to be put adjacent to the highway. The HTNF is considered a participating agency in the proposed project, and coordination and consultation with the HTNF will be ongoing throughout life of the project.

OTHERS CONSULTED

Information pertaining to the proposed project, along with information on the other two shoulder widening projects discussed at the public scoping meeting was sent to nine private local landowners, the Inyo National Forest, and the Bureau of Land Management on November 5, 2018. No responses have received to date from any of those individuals or groups contacted as a result of that effort.

The District Architectural Historian contacted the Eastern California Museum and the Mono County Historical Society for input via letter on June 24, 2020. No responses were received.

Public circulation of the Draft Initial Study and Proposed Mitigation Negative Declaration / Environmental Assessment is scheduled to occur for 30 days between February 1 and March 8, 2021. Requests for a public meeting will be accepted during the public circulation and comment period.

Chapter 5 – List of Preparers

The following Department staff contributed to the preparation of this IS-MND/EA.

Dennee Alcala; District Deputy Director Planning and Environmental. Contribution: Environmental Document review and approval.

Jennifer Blake, Associate Environmental Planner (Archaeology); M.A. Anthropology, San Francisco State University; 13 years of experience in California and Great Basin archaeology. Professionally Qualified Staff-Principal Investigator, Prehistoric Archaeology. Contribution: Archaeological studies oversight, HPSR and APE preparation, tribal consultation.

Bradley Bowers, Environmental Engineer and Paleontology Specialist; M.S. Environmental Science and Management, University of California, Santa Barbara; B.S. Magna Cum Laude, Geological Sciences & Environmental Hydrogeology, California State University, Los Angeles; 7 years of experience working in the environmental sector. Contribution: Environmental Document Preparation, Geological Evaluation, Paleontology Evaluation, Stormwater Oversight

Angela Calloway, Senior Environmental Planner. M.A., Anthropology, California State University, Sacramento; B.S., Anthropology, Indiana State University; 16 years of experience in California and Great Basin archaeology and environmental document preparation. Contribution: Environmental document oversight.

Matthew Goike, Environmental Engineer. B.S. and M.S. in Civil Engineering from Michigan State University; 18 years of experience in transportation project development, 2 years of experience as a specialist in Air, Noise, Hazardous Waste, Water, Wastewater, and Stormwater. Contribution: Air, Noise, Hazardous Waste, and Stormwater assessment.

Jim Hibbert, District Landscape Architect; B.A. Geography, University of Alaska-Fairbanks, Fairbanks, AK; 2nd B.L.A. Landscape Architecture, University of Oregon, Eugene, OR. California Licensed Landscape Architect No. 5136. 18 years of experience in landscape architecture; Contribution: Visual Impacts Analysis.

Jeremy Milos, Senior Transportation Planner. B.A., Geography, University of Southern California; 19 years of experience. Contribution: Project Management.

Stephen Pfeiler, Associate Biologist. B.S. in Environmental Science from California State University Channel Islands; M.S., in Wildlife Biology from Utah State University; 3 years of experience as a geotechnical specialist for quality assurance/quality control in construction-related projects; 6 years of experience in research, restoration, and conservation of biological resources. Contribution: Natural Environment Study and Addendum.

Gayle Rosander, Senior Transportation Planner. Contribution: Environmental NEPA document quality review.

Bryan Winzenread, Deputy District 9 Director for Programming and Project Management. Contribution: Environmental document review and project oversight

Emilie Zelazo, Associate Environmental Planner (Archaeology); M.A. Anthropology, California State University Sacramento; M.A. Historic Preservation, Savannah College of Art and Design; 16 years of experience in California and Great Basin archaeology. Professionally Qualified Staff-Principal Investigator Prehistoric Archaeology, Architectural Historian. Contribution: Linear resource analysis and documentation; Environmental Document preparation.

Chapter 6 – Distribution List

The notice of intent and copies of the environmental document will be electronically transfered to the California State Clearinghouse on February 1, 2021, for distribution to applicable State agencies.

An electronic copy of this document will be sent to the Humboldt-Toiyabe National Forest, on February 1, 2021.

APPENDICES

Appendix A. Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
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Making Conservation a California Way of Life.

November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Appendix C. Avoidance, Minimization and/or Mitigation Summary

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

Environmental Commitments Record (ECR)

DIST-CO-RTE: 09 - MNO - 395 **PM/PM:** 91.600/93.400 **EA/Project ID:** 09-36800_ / 0917000011
Project Description: WIDEN SHOULDERS
Date (Last modification): 1/14/2021
Environmental Planner: Emilie Zelazo **Phone:** 760-872-6041
Construction Liaison: Ryan Spaulding **Phone:** 760-872-5244
Resident Engineer: **Phone:**

PERMITS

Permit	Agency	Application Submitted	Permit Received	Permit Expiration	Permit Requirements Completed by	Permit Requirements Completed on	Comments
1600	California Department of Fish & Wildlife						
401	Regional Water Quality Control Board						
CEQA Review	California Department of Fish & Wildlife						
CEQA Review	California Department of Fish & Wildlife						
CEQA Review	California Department of Fish & Wildlife						

ENVIRONMENTAL COMMITMENTS

PS&E/BEFORE RTL

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Biology	Purchase credits from a mitigation bank or pay into an in-lieu fee (ILF) program as mitigation for impacts to wetlands. Final credit amounts and ratios will be determined through coordination with regulatory agencies during the permit process.	Env Doc	n/a	PM, District Biologist	Ensure coordination with regulatory agencies are completed during PS&E phase, prior to RTL. Comply with mitigation measures proposed by the permitting agency to lessen the impacts to wetlands.					

Page 1

Environmental Commitments Record for Sonora Jct Shoulders

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

PRE-CONSTRUCTION

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Biology	Contractor must implement the following measures to avoid impacts from invasive species, such as noxious weeds: o Wash all vehicles and heavy equipment, including tires and undercarriage, and hand-held tools, such as shovels and rakes, that have been used off-site with water heated over 100 degrees before bringing them onto the Project site; o Vacuum and clean the interior of vehicles and heavy equipment that have been used off-site before bringing them onto the Project site; o Clean by pressure washing, washing in hot water, freezing or bleaching personal gear and clothing, including footwear, that have been worn off-site before bringing them onto the Project site; o Do not transport soil or other fill material from off-site locations to the PIA unless they are certified weed free; and o Only use seeds and seedlings approved by the Caltrans biologist and landscape architect, when restoration is required. o Prepare soils appropriately to encourage new seeds and plants to survive. Contractor must submit a certificate describing the process used to clean equipment prior to on-site use.	NES	NSSP	RE, Contractor, District Biologist, ECL	Follow the provisions outlined in the NSSP to prevent the spread of invasive species and obtain all needed certificates. Equipment must be cleaned at least 48 hours prior to use following measured outlined in task description.					
Biology	Environmentally sensitive area (ESA) fencing will be installed between the construction area and wetlands, waters, and riparian vegetation outside of the project impact area (PIA).	Env Doc	SSP	RE, Contractor, District Biologist, ECL	Install ESA fencing in the biological PIA as prescribed in the SSP.					
Biology	All construction personnel on site will receive training prior to construction which will include locations of ESA fencing and other conditions required to avoid or minimize impacts to aquatic resources.	Env Doc	SSP	RE, Contractor, District Biologist, ECL	Ensure all construction personnel receive biological training concerning the ESA fencing and other conditions for the protection of aquatic resources.					

Environmental Commitments Record for Sonora Jct Shoulders

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Biology	Pre-construction nesting bird surveys will be conducted at least 48 hours prior to any work being done regardless of time of year as species nesting times vary within and outside of the normal nesting period. If nesting birds are found within the project area, the District Biologist will determine if work may be delayed or if a no work buffer will be placed around the nest.	NES	SSP	RE, Contractor, District Biologist, ECL	Ensure pre-construction nesting bird surveys are conducted as prescribed. If nesting birds are found, apply measures dictated by the District Biologist.					
Visual Resources	Retaining walls and slopes near Hot Creek should consider opportunities for aesthetic treatment and planting riparian revegetation to the greatest extent feasible. Opportunities will be developed by the Caltrans Project Landscape Architect.	Env Doc	SSP	RE, Contractor, District Landscape Architect, ECL	Consider aesthetic treatments for retaining walls and cut slopes constructed near Hot Creek.					
Water Quality	All appropriate water pollution control Best Management Practices (BMPs) will be implemented prior to ground disturbance to avoid degradation of water quality from construction activities.	Std. Spec	Std. Spec	RE, Contractor, District Stormwater Engineer, ECL	Implement all water quality BMPs prior to start of ground disturbance.					
Water Quality	The contractor will be required to prepare and submit for Caltrans approval a Stormwater Pollution Prevention Plan (SWPPP) which will outline the specific BMP types and placement locations to avoid water quality impacts.	Env Doc	n/a	PM, RE, Contractor, District Stormwater Engineer	Ensure SWPPP is prepared and approved by Caltrans environmental engineer prior to start of construction. Implement water quality BMPs as prescribed in SWPPP.					

CONSTRUCTION

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Biology	A full-time biological monitor will be onsite to monitor all construction activities in and around aquatic resources.	Env Doc	SSP	RE, Contractor, District Biologist, ECL	Ensure the biological monitor is onsite during construction activities in and around aquatic resources.					
Hazardous Waste	Disposal of treated wood waste will follow Caltrans standard specifications and all State and County requirements.	SSP	SSP	RE, Contractor, District Environmental Engineer, ECL	Dispose treated wood waste as prescribed in the project specifications and in compliance with all State and County requirements.					
Hazardous Waste	If disposal of roadside soils is required, Aerially Deposited Lead (ADL) testing will occur to confirm the presence or	SSP	SSP	RE, Contractor, District	Test excess roadside soils prior to disposal					

Environmental Commitments Record for Sonora Jct Shoulders

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
	absence of lead contamination. If confirmed, soil disposal will adhere to all Caltrans standard specifications as well as State and County requirements.			Environmental Engineer, ECL	for ADL. Follow all project specifications and State and County requirements for soils containing ADL.					
Visual Resources	Anchored wire mesh installed on cut slopes, metal beam guardrail, and retaining walls should be treated to match the color and all aesthetic treatments used on other projects in the vicinity. Color treatment, such as Natina, will also help anchor wire mesh and metal beam guardrail to visually blend in with the background soil and vegetation, thereby reducing its noticeability by drivers.	SSP	SSP	RE, Contractor, District Landscape Architect, ECL	Color treat anchored wire mesh, metal beam guardrail and retaining walls.					
Visual Resources	The tops of cut slopes will be contoured into a rounded shape where feasible to mimic natural topography.	Env Doc	SSP	RE, Contractor, District Landscape Architect, ECL	Contour the tops of cut slopes where feasible.					
Visual Resources	Existing vegetation will be preserved to the greatest extent feasible by tightening contours, cut slopes and retaining walls during the Design phase of the project. Disturbance or removal of existing vegetation will only occur when necessary to construct the project.	Env Doc	n/a	RE, Contractor, District Landscape Architect, ECL	Preserve existing vegetation as much as possible when contouring and cutting slopes, and when installing retaining walls.					
Visual Resources	If wildlife exclusionary fencing is approved and added to the project description, the fencing should be color treated, such as with Natina, to blend the fence visually into the background vegetation and soils.	Env Doc	SSP	RE, Contractor, District Landscape Architect, ECL	Color treat wildlife exclusionary fencing if it is added to the project description.					

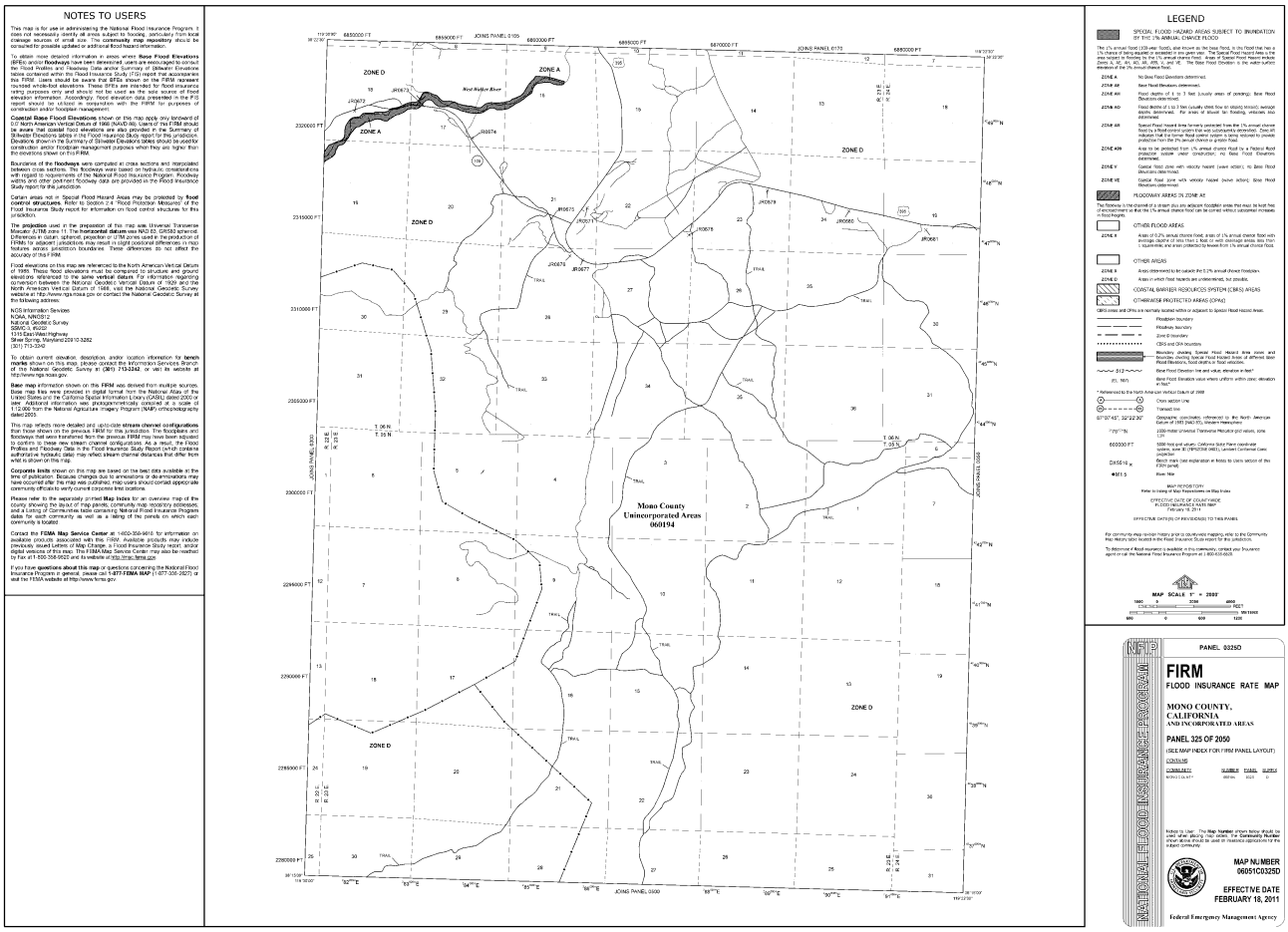
POST-CONSTRUCTION

Category	Task and Brief Description	Source	Included in PS&E Package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA
Visual Resources	Disturbed slopes will be revegetated with native plant species after construction has completed. This will reduce the time needed for vegetation to regrow on the slopes, help avoid propagation of invasive plant species, and reduce soil erosion from wind and rain.	Env Doc	n/a	RE, Contractor, District Landscape Architect, ECL	Revegetate disturbed slopes with native plant species after construction has completed.					

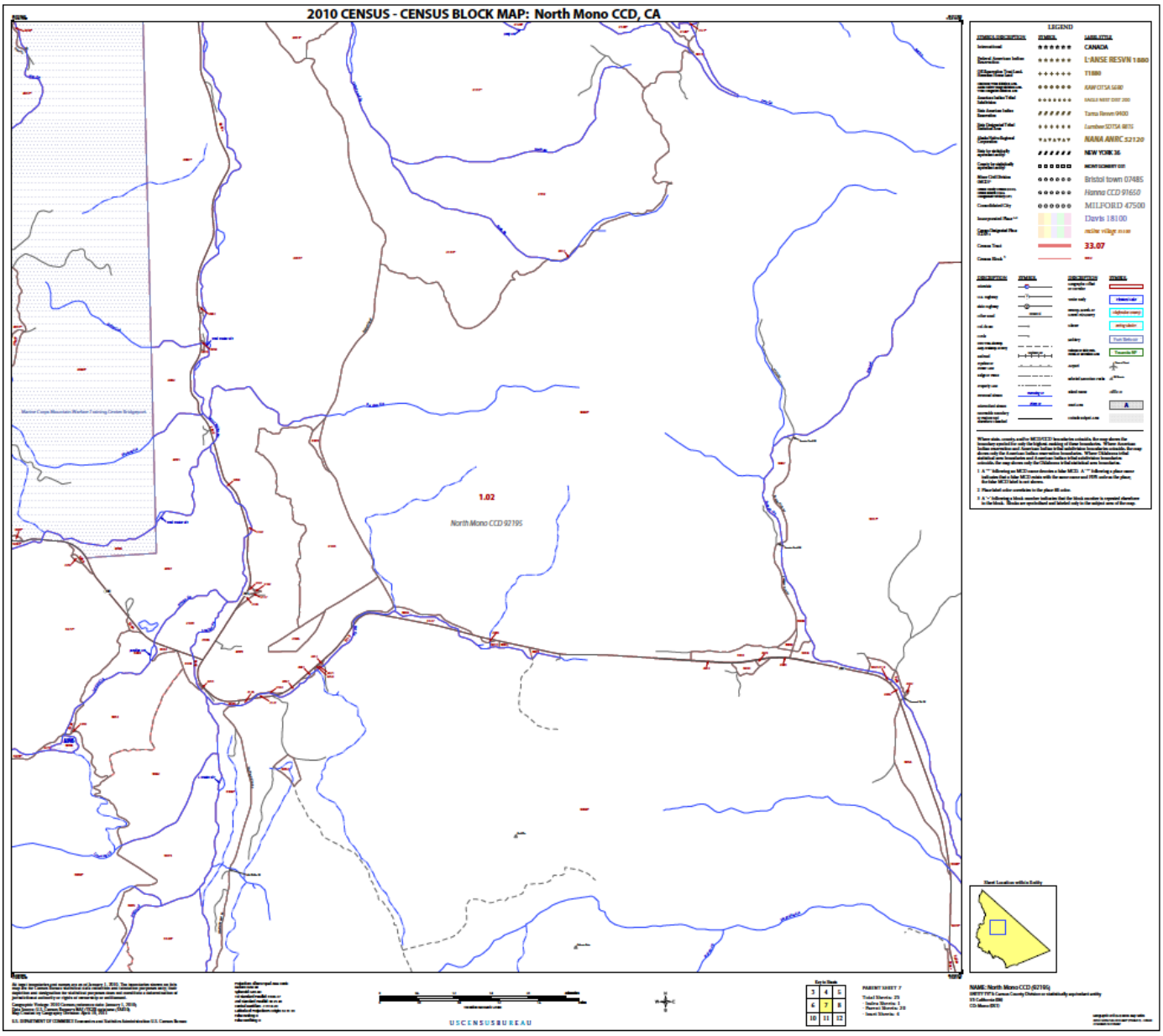
Appendix D. Required Consultation/Concurrence Documentation (for final document only)

Appendix E. Comment Letters and Responses (if not included in Chapter 4; for final document only)

Appendix F. FEMA FIRM Floodplain Map



Appendix G. Census Block Map



Appendix H. Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
Phone: (775) 861-6300 Fax: (775) 861-6301
http://www.fws.gov/nevada/

In Reply Refer To:
Consultation Code: 08ENVD00-2019-SLI-0281
Event Code: 08ENVD00-2021-E-00346
Project Name: Sonora Junction Shoulders

January 15, 2021

Subject: Updated list of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The attached species list indicates threatened, endangered, proposed, and candidate species and designated or proposed critical habitat that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act of 1973, as amended (ESA, 16 U.S.C. 1531 *et seq.*), for projects that are authorized, funded, or carried out by a Federal agency. Candidate species have no protection under the ESA but are included for consideration because they could be listed prior to the completion of your project. Consideration of these species during project planning may assist species conservation efforts and may prevent the need for future listing actions. For additional information regarding species that may be found in the proposed project area, visit http://www.fws.gov/nevada/es/ipac.html.

The purpose of the ESA is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects 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. Guidelines for preparing a Biological Assessment can be found at: http://www.fws.gov/midwest/endangered/section7/ba_guide.html.

If a Federal action agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species, and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this species list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally listed, proposed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally, as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation, for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the attached list.

The Nevada Fish and Wildlife Office (NFWO) no longer provides species of concern lists. Most of these species for which we have concern are also on the Animal and Plant At-Risk Tracking List for Nevada (At-Risk list) maintained by the State of Nevada's Natural Heritage Program (Heritage). Instead of maintaining our own list, we adopted Heritage's At-Risk list and are partnering with them to provide distribution data and information on the conservation needs for at-risk species to agencies or project proponents. The mission of Heritage is to continually evaluate the conservation priorities of native plants, animals, and their habitats, particularly those most vulnerable to extinction or in serious decline. In addition, in order to avoid future conflicts, we ask that you consider these at-risk species early in your project planning and explore management alternatives that provide for their long-term conservation.

For a list of at-risk species by county, visit Heritage's website (http://heritage.nv.gov). For a specific list of at-risk species that may occur in the project area, you can obtain a data request form from the website (http://heritage.nv.gov/get_data) or by contacting the Administrator of Heritage at 901 South Stewart Street, Suite 5002, Carson City, Nevada 89701-5245, (775) 684-2900. Please indicate on the form that your request is being obtained as part of your coordination with the Service under the ESA. During your project analysis, if you obtain new information or data for any Nevada sensitive species, we request that you provide the information to Heritage at the above address.

Furthermore, certain species of fish and wildlife are classified as protected by the State of Nevada (http://www.leg.state.nv.us/NAC/NAC-503.html). You must first obtain the appropriate license, permit, or written authorization from the Nevada Department of Wildlife (NDOW) to

take, or possess any parts of protected fish and wildlife species. Please visit http://www.ndow.org or contact NDOW in northern Nevada (775) 688-1500, in southern Nevada (702) 486-5127, or in eastern Nevada (775) 777-2300.

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the Service's wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

The Service's Pacific Southwest Region developed the *Interim Guidelines for the Development of a Project Specific Avian and Bat Protection Plan for Wind Energy Facilities* (Interim Guidelines). This document provides energy facility developers with a tool for assessing the risk of potential impacts to wildlife resources and delineates how best to design and operate a bird- and bat-friendly wind facility. These Interim Guidelines are available upon request from the NFWO. The intent of a Bird and Bat Conservation Strategy is to conserve wildlife resources while supporting project developers through: (1) establishing project development in an adaptive management framework; (2) identifying proper siting and project design strategies; (3) designing and implementing pre-construction surveys; (4) implementing appropriate conservation measures for each development phase; (5) designing and implementing appropriate post-construction monitoring strategies; (6) using post-construction studies to better understand the dynamics of mortality reduction (*e.g.*, changes in blade cut-in speed, assessments of blade "feathering" success, and studies on the effects of visual and acoustic deterrents) including efforts tied into Before-After/Control-Impact analysis; and (7) conducting a thorough risk assessment and validation leading to adjustments in management and mitigation actions.

The template and recommendations set forth in the Interim Guidelines were based upon the Avian Powerline Interaction Committee's Avian Protection Plan template (http://www.aplic.org/) developed for electric utilities and modified accordingly to address the unique concerns of wind energy facilities. These recommendations are also consistent with the Service's wind energy guidelines. We recommend contacting us as early as possible in the planning process to discuss the need and process for developing a site-specific Bird and Bat Conservation Strategy.

The Service has also developed guidance regarding wind power development in relation to prairie grouse leks (sage-grouse are included in this). This document can be found at: http://www.fws.gov/southwest/es/Oklahoma/documents/te_species/wind%20power/prairie%20grouse%20lek%205%20mile%20public.pdf.

Migratory Birds are a Service Trust Resource. Based on the Service's conservation responsibilities and management authority for migratory birds under the Migratory Bird Treaty Act of 1918, as amended (MBTA; 16 U.S.C. 703 *et seq.*), we recommend that any land clearing or other surface disturbance associated with proposed actions within the project area be timed to avoid potential destruction of bird nests or young, or birds that breed in the area. Such destruction may be in violation of the MBTA. Under the MBTA, nests with eggs or young of migratory birds may not be harmed, nor may migratory birds be killed. Therefore, we recommend land clearing be conducted outside the avian breeding season. If this is not feasible,

we recommend a qualified biologist survey the area prior to land clearing. If nests are located, or if other evidence of nesting (*i.e.*, mated pairs, territorial defense, carrying nesting material, transporting food) is observed, a protective buffer (the size depending on the habitat requirements of the species) should be delineated and the entire area avoided to prevent destruction or disturbance to nests until they are no longer active.

Guidance for minimizing impacts to migratory birds for projects involving communications towers (*e.g.*, cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

If wetlands, springs, or streams are are known to occur in the project area or are present in the vicinity of the project area, we ask that you be aware of potential impacts project activities may have on these habitats. Discharge of fill material into wetlands or waters of the United States is regulated by the U.S. Army Corps of Engineers (ACOE) pursuant to section 404 of the Clean Water Act of 1972, as amended. We recommend you contact the ACOE's Regulatory Section regarding the possible need for a permit. For projects located in northern Nevada (Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lyon, Mineral, Pershing, Storey, and Washoe Counties) contact the Reno Regulatory Office at 300 Booth Street, Room 3060, Reno, Nevada 89509, (775) 784-5304; in southern Nevada (Clark, Lincoln, Nye, and White Pine Counties) contact the St. George Regulatory Office at 321 North Mall Drive, Suite L-101, St. George, Utah 84790-7314, (435) 986-3979; or in California along the eastern Sierra contact the Sacramento Regulatory Office at 650 Capitol Mall, Suite 5-200, Sacramento, California 95814, (916) 557-5250.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

The table below outlines lead FWS field offices by county and land ownership/project type. Please refer to this table when you are ready to coordinate (including requests for section 7 consultation) with the field office corresponding to your project, and send any documentation regarding your project to that corresponding office. Therefore, the lead FWS field office may not be the office listed above in the letterhead.

Lead FWS offices by County and Ownership/Program

County	Ownership/Program	Species	Office Lead*
Alameda	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Alameda	All ownerships but tidal/estuarine	All	SFWO
Alpine	Humboldt Toiyabe National Forest	All	RFWO

Alpine	Lake Tahoe Basin Management Unit	All	RFWO
Alpine	Stanislaus National Forest	All	SFWO
Alpine	El Dorado National Forest	All	SFWO
Colusa	Mendocino National Forest	All	AFWO
Colusa	Other	All	By jurisdiction (see map)
Contra Costa	Legal Delta (Excluding ECCHCP)	All	BDFWO
Contra Costa	Antioch Dunes NWR	All	BDFWO
Contra Costa	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Contra Costa	All ownerships but tidal/estuarine	All	SFWO
Del Norte	All	All	AFWO
El Dorado	El Dorado National Forest	All	SFWO
El Dorado	LakeTahoe Basin Management Unit		RFWO
Glenn	Mendocino National Forest	All	AFWO
Glenn	Other	All	By jurisdiction (see map)
Humboldt	All except Shasta Trinity National Forest	All	AFWO
Humboldt	Shasta Trinity National Forest	All	YFWO
Lake	Mendocino National Forest	All	AFWO
Lake	Other	All	By jurisdiction (see map)
Lassen	Modoc National Forest	All	KFWO
Lassen	Lassen National Forest	All	SFWO
Lassen	Toiyabe National Forest	All	RFWO
Lassen	BLM Surprise and Eagle Lake Resource Areas	All	RFWO

Lassen	BLM Alturas Resource Area	All	KFWO
Lassen	Lassen Volcanic National Park	All (includes Eagle Lake trout on all ownerships)	SFWO
Lassen	All other ownerships	All	By jurisdiction (see map)
Marin	Tidal wetlands/marsh adjacent to Bays	Salt marsh species, delta smelt	BDFWO
Marin	All ownerships but tidal/estuarine	All	SFWO
Mendocino	Russian River watershed	All	SFWO
Mendocino	All except Russian River watershed	All	AFWO
Modoc	Modoc National Forest	All	KFWO
Modoc	BLM Alturas Resource Area	All	KFWO
Modoc	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Modoc	BLM Surprise and Eagle Lake Resource Areas	All	RFWO
Modoc	All other ownerships	All	By jurisdiction (See map)
Mono	Inyo National Forest	All	RFWO
Mono	Humboldt Toiyabe National Forest	All	RFWO
	All ownerships but tidal/estuarine	All	SFWO
Napa			
Napa	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Nevada	Humboldt Toiyabe National Forest	All	RFWO
Nevada	All other ownerships	All	By jurisdiction (See map)

Placer	Lake Tahoe Basin Management Unit	All	RFWO
Placer	All other ownerships	All	SFWO
Sacramento	Legal Delta	Delta Smelt	BDFWO
Sacramento	Other	All	By jurisdiction (see map)
San Francisco	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Francisco	All ownerships but tidal/estuarine	All	SFWO
San Mateo	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
San Mateo	All ownerships but tidal/estuarine	All	SFWO
San Joaquin	Legal Delta excluding San Joaquin HCP	All	BDFWO
San Joaquin	Other	All	SFWO
Santa Clara	Tidal wetlands/marsh adjacent to San Francisco Bay	Salt marsh species, delta smelt	BDFWO
Santa Clara	All ownerships but tidal/estuarine	All	SFWO
Shasta	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Shasta	Hat Creek Ranger District	All	SFWO
Shasta	Bureau of Reclamation (Central Valley Project)	All	BDFWO
Shasta	Whiskeytown National Recreation Area	All	YFWO

Shasta	BLM Alturas Resource Area	All	KFWO
Shasta	Caltrans	By jurisdiction	SFWO/AFWO
Shasta	Ahjumawi Lava Springs State Park	Shasta crayfish	SFWO
Shasta	All other ownerships	All	By jurisdiction (see map)
Shasta	Natural Resource Damage Assessment, all lands	All	SFWO/BDFWO
Sierra	Humboldt Toiyabe National Forest	All	RFWO
Sierra	All other ownerships	All	SFWO
Siskiyou	Klamath National Forest (except Ukonom District)	All	YFWO
Siskiyou	Six Rivers National Forest and Ukonom District	All	AFWO
Siskiyou	Shasta Trinity National Forest	All	YFWO
Siskiyou	Lassen National Forest	All	SFWO
Siskiyou	Modoc National Forest	All	KFWO
Siskiyou	Lava Beds National Volcanic Monument	All	KFWO
Siskiyou	BLM Alturas Resource Area	All	KFWO
Siskiyou	Klamath Basin National Wildlife Refuge Complex	All	KFWO
Siskiyou	All other ownerships	All	By jurisdiction (see map)
Solano	Suisun Marsh	All	BDFWO
Solano	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Solano	All ownerships but tidal/estuarine	All	SFWO
Solano	Other	All	By jurisdiction (see map)

Sonoma	Tidal wetlands/marsh adjacent to San Pablo Bay	Salt marsh species, delta smelt	BDFWO
Sonoma	All ownerships but tidal/estuarine	All	SFWO
Tehama	Mendocino National Forest	All	AFWO
Tehama	Shasta Trinity National Forest except Hat Creek Ranger District (administered by Lassen National Forest)	All	YFWO
Tehama	All other ownerships	All	By jurisdiction (see map)
Trinity	BLM	All	AFWO
Trinity	Six Rivers National Forest	All	AFWO
Trinity	Shasta Trinity National Forest	All	YFWO
Trinity	Mendocino National Forest	All	AFWO
Trinity	BIA (Tribal Trust Lands)	All	AFWO
Trinity	County Government	All	AFWO
Trinity	All other ownerships	All	By jurisdiction (See map)
Yolo	Yolo Bypass	All	BDFWO
Yolo	Other	All	By jurisdiction (see map)
All	FERC-ESA	All	By jurisdiction (see map)
All	FERC-ESA	Shasta crayfish	SFWO
All	FERC-Relicensing (non-ESA)	All	BDFWO

***Office Leads:**

AFWO=Arcata Fish and Wildlife Office

BDFWO=Bay Delta Fish and Wildlife Office

KFWO=Klamath Falls Fish and Wildlife Office

RFWO=Reno Fish and Wildlife Office

YFWO=Yreka Fish and Wildlife Office

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Reno Fish And Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147
(775) 861-6300

Project Summary

Consultation Code: 08ENVD00-2019-SLI-0281
Event Code: 08ENVD00-2021-E-00346
Project Name: Sonora Junction Shoulders
Project Type:
Project Description: Widen shoulders from 4 ft to 8 ft.
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.34860615253451,-119.42991675627408,14z

Counties: Mono County, California

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Sierra Nevada Bighorn Sheep *Ovis canadensis sierrae* Population: Sierra Nevada There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3646	Endangered

Birds

NAME	STATUS
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered
Yellow-billed Cuckoo *Coccyzus americanus* Population: Western U.S. DPS There is **proposed** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3911	Threatened

Amphibians

NAME	STATUS
Sierra Nevada Yellow-legged Frog *Rana sierrae* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/9529	Endangered
Yosemite Toad *Anaxyrus canorus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/7255	Threatened

Fishes

NAME	STATUS
Lahontan Cutthroat Trout *Oncorhynchus clarkii henshawi* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3964	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

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

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
Brewer's Sparrow *Spizella breweri* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9291	Breeds May 15 to Aug 10

NAME	BREEDING SEASON
Green-tailed Towhee *Pipilo chlorurus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9444	Breeds May 1 to Aug 10
Olive-sided Flycatcher *Contopus cooperi* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Sage Thrasher *Oreoscoptes montanus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9433	Breeds Apr 15 to Aug 10
White Headed Woodpecker *Picoides albolarvatus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9411	Breeds May 1 to Aug 15

Probability Of Presence Summary

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

Probability of Presence (■)

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

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

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12

(0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

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

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

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

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

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

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

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

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

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

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

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

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?
To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

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

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

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

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

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

Wetlands

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

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

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1C

RIVERINE

- R3UBH

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Fales Hot Springs (3811934) OR Buckeye Ridge (3811924) OR Chris Flat (3811944) OR Lost Cannon Peak (3811945) OR Mt. Patterson (3811943) OR Pickel Meadow (3811935) OR Tower Peak (3811925) OR Twin Lakes (3811923) OR Mt. Jackson (3811933))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Accipiter gentilis northern goshawk	G5 S3	None None	BLM_S-Sensitive CDF_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	7,000 8,200	433 S:3	0	0	0	0	0	3	3	0	3	0	0
Agrostis humilis mountain bent grass	G4Q S2	None None	Rare Plant Rank - 2B.3	9,555 9,555	20 S:1	0	0	0	0	0	1	0	1	1	0	0
Anaxyrus canorus Yosemite toad	G2G3 S2S3	Threatened None	CDFW_SSC-Species of Special Concern IUCN_EN-Endangered USFS_S-Sensitive	8,000 9,950	223 S:22	0	0	0	0	0	22	6	16	22	0	0
Antrozous pallidus pallid bat	G5 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	6,880 6,880	420 S:1	0	0	0	0	0	1	1	0	1	0	0
Aplodontia rufa californica Sierra Nevada mountain beaver	G5T3T4 S2S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	8,500 8,500	131 S:1	0	0	0	0	0	1	1	0	1	0	0
Astragalus platytropis broad-keeled milk-vetch	G5 S3	None None	Rare Plant Rank - 2B.2	9,200 11,200	18 S:11	0	1	0	0	0	10	10	1	11	0	0
Atractelmis wawona Wawona riffle beetle	G3 S1S2	None None		7,148 7,148	80 S:1	0	0	0	0	0	1	0	1	1	0	0
Boechera bodiensis Bodie Hills rockcress	G3 S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive USFS_S-Sensitive	6,600 11,000	33 S:7	0	0	1	0	0	6	2	5	7	0	0
Boechera cobrensis Masonic rockcress	G5 S3	None None	Rare Plant Rank - 2B.3	6,600 7,230	28 S:4	0	1	0	0	0	3	0	4	4	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Bombus morrisoni Morrison bumble bee	G4G5 S1S2	None None	IUCN_VU-Vulnerable	5,500 9,800	86 S:3	0	0	0	0	0	3	3	0	3	0	0
Botrychium crenulatum scalloped moonwort	G4 S3	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive	8,540 8,540	138 S:1	0	0	0	0	0	1	0	1	1	0	0
Carex occidentalis western sedge	G4 S3	None None	Rare Plant Rank - 2B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	7,600 7,600	8 S:1	0	0	0	0	0	1	1	0	1	0	0
Carex petasata Liddon's sedge	G5 S3	None None	Rare Plant Rank - 2B.3	7,600 7,600	73 S:1	0	0	0	0	0	1	1	0	1	0	0
Carex vallicola western valley sedge	G5 S2	None None	Rare Plant Rank - 2B.3	7,200 9,187	14 S:5	0	1	0	0	0	4	4	1	5	0	0
Catostomus platyrhynchus mountain sucker	G5 S3	None None	CDFW_SSC-Species of Special Concern	5,800 6,700	22 S:3	0	0	0	0	0	3	3	0	3	0	0
Chaenactis douglasii var. alpina alpine dusty maidens	G5T5 S2	None None	Rare Plant Rank - 2B.3	10,000 10,000	12 S:1	0	0	0	0	0	1	1	0	1	0	0
Claytonia megarhiza fell-fields claytonia	G5 S2	None None	Rare Plant Rank - 2B.3	9,500 9,500	24 S:1	0	0	0	0	0	1	1	0	1	0	0
Claytonia umbellata Great Basin claytonia	G4 S1	None None	Rare Plant Rank - 2B.3	10,600 11,400	5 S:3	0	1	0	0	0	2	2	1	3	0	0
Cryptantha crymophila subalpine cryptantha	G3 S3	None None	Rare Plant Rank - 1B.3	9,900 10,000	16 S:2	0	0	0	0	0	2	2	0	2	0	0
Draba asterophora var. asterophora Tahoe draba	G2T2? S2?	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive	10,300 10,800	11 S:2	0	0	0	0	0	2	1	1	2	0	0
Draba cana canescent draba	G5 S2	None None	Rare Plant Rank - 2B.3	11,500 11,500	8 S:1	0	0	0	0	0	1	1	0	1	0	0
Draba incrassata Sweetwater Mountains draba	G2G3 S2S3	None None	Rare Plant Rank - 1B.3 USFS_S-Sensitive	10,000 11,300	17 S:17	0	0	0	0	0	17	11	6	17	0	0
Elymus scribneri Scribner's wheat grass	G5 S3	None None	Rare Plant Rank - 2B.3	9,800 11,200	12 S:3	0	0	0	0	0	3	3	0	3	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Erethizon dorsatum North American porcupine	G5 S3	None None	IUCN_LC-Least Concern	7,314 9,616	523 S:6	0	0	0	0	0	6	5	1	6	0	0
Festuca minutiflora small-flowered fescue	G5 S2	None None	Rare Plant Rank - 2B.3	10,270 10,640	6 S:2	0	2	0	0	0	0	0	2	2	0	0
Great Basin Cutthroat Trout Headwater Great Basin Cutthroat Trout Headwater	GNR SNR	None None		7,600 7,600	1 S:1	0	0	1	0	0	0	1	0	1	0	0
Gulo gulo California wolverine	G4 S1	Proposed Threatened Threatened	CDFW_FP-Fully Protected IUCN_NT-Near Threatened USFS_S-Sensitive	6,900 11,600	174 S:5	0	0	0	0	0	5	5	0	5	0	0
Helodium blandowii Blandow's bog moss	G4 S2	None None	Rare Plant Rank - 2B.3 USFS_S-Sensitive	7,875 7,875	16 S:1	0	0	0	0	0	1	0	1	1	0	0
Hydromantes platycephalus Mount Lyell salamander	G4 S4	None None	CDFW_WL-Watch List IUCN_LC-Least Concern	9,000 9,000	47 S:1	1	0	0	0	0	0	0	1	1	0	0
Kobresia myosuroides seep kobresia	G5 S2	None None	Rare Plant Rank - 2B.2	7,300 7,334	10 S:2	0	0	2	0	0	0	0	2	2	0	0
Lasionycteris noctivagans silver-haired bat	G5 S3S4	None None	IUCN_LC-Least Concern WBWG_M-Medium Priority		139 S:1	0	0	0	0	0	1	1	0	1	0	0
Lepus townsendii townsendii western white-tailed jackrabbit	G5T5 S3?	None None	CDFW_SSC-Species of Special Concern	6,900 10,750	24 S:3	0	0	0	0	0	3	3	0	3	0	0
Myotis thysanodes fringed myotis	G4 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive WBWG_H-High Priority	5,400 5,400	86 S:1	0	0	0	0	0	1	1	0	1	0	0
Myotis yumanensis Yuma myotis	G5 S4	None None	BLM_S-Sensitive IUCN_LC-Least Concern WBWG_LM-Low-Medium Priority	6,880 6,880	265 S:1	0	0	0	0	0	1	1	0	1	0	0
Ochotona princeps schisticeps gray-headed pika	G5T2T4 S2S4	None None	IUCN_NT-Near Threatened	7,500 11,160	332 S:16	0	0	0	0	3	13	8	8	13	3	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Oncorhynchus clarkii henshawi Lahontan cutthroat trout	G4T3 S2	Threatened None	AFS_TH-Threatened	7,300 9,290	27 S:4	0	1	2	0	0	1	4	0	4	0	0
Oncorhynchus clarkii seleniris Paiute cutthroat trout	G4T1T2 S1S2	Threatened None	AFS_EN-Endangered	8,000 8,600	12 S:6	0	0	0	0	0	6	6	0	6	0	0
Orthotrichum spjutii Spjut's bristle moss	G1G2 S1	None None	Rare Plant Rank - 1B.3	8,800 8,800	2 S:1	0	0	0	0	0	1	1	0	1	0	0
Phacelia monoensis Mono County phacelia	G3 S2	None None	Rare Plant Rank - 1B.1 BLM_S-Sensitive USFS_S-Sensitive	9,500 9,500	14 S:1	0	0	0	0	1	0	1	0	0	1	0
Polemonium chartaceum Mason's sky pilot	G2 S2	None None	Rare Plant Rank - 1B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	10,800 11,485	12 S:6	3	1	0	0	0	2	4	2	6	0	0
Potamogeton zosteriformis eel-grass pondweed	G5 S3	None None	Rare Plant Rank - 2B.2	7,000 7,000	20 S:1	0	0	0	0	0	1	1	0	1	0	0
Prosopium williamsoni mountain whitefish	G5 S3	None None	CDFW_SSC-Species of Special Concern	5,800 8,100	23 S:4	0	0	0	0	0	4	4	0	4	0	0
Rana sierrae Sierra Nevada yellow-legged frog	G1 S1	Endangered Threatened	CDFW_WL-Watch List IUCN_EN-Endangered USFS_S-Sensitive	8,200 10,100	659 S:19	0	2	3	0	0	14	4	15	19	0	0
Riparia riparia bank swallow	G5 S2	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	6,700 7,130	298 S:3	0	0	0	0	0	3	0	3	3	0	0
Sabulina stricta bog sandwort	G5 S3	None None	Rare Plant Rank - 2B.3		18 S:1	0	0	0	0	0	1	1	0	1	0	0
Senecio pattersonensis Mt. Patterson senecio	G3 S3	None None	Rare Plant Rank - 1B.3 USFS_S-Sensitive	9,700 11,400	11 S:10	0	0	0	0	0	10	10	0	10	0	0
Sidalcea multifida cut-leaf checkerbloom	G3 S2	None None	Rare Plant Rank - 2B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	7,800 8,350	32 S:3	0	2	0	0	0	1	0	3	3	0	0
Silene oregana Oregon campion	G4 S2	None None	Rare Plant Rank - 2B.2	9,600 9,600	32 S:1	0	0	0	0	0	1	1	0	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Sorex lyelli Mount Lyell shrew	G3G4 S3S4	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	8,150 10,750	11 S:2	0	0	0	0	0	2	2	0	2	0	0
Speyeria nokomis carsonensis Carson Valley silverspot	G3T1T2 S1	None None		5,996 8,264	18 S:6	0	1	0	0	0	5	0	6	6	0	0
Sphenopholis obtusata prairie wedge grass	G5 S2	None None	Rare Plant Rank - 2B.2	8,600 8,600	19 S:1	0	0	0	0	0	1	1	0	1	0	0
Streptanthus oliganthus Masonic Mountain jewelflower	G3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive USFS_S-Sensitive	7,500 10,000	21 S:6	0	1	0	0	0	5	5	1	6	0	0
Strix nebulosa great gray owl	G5 S1	None Endangered	CDF_S-Sensitive IUCN_LC-Least Concern USFS_S-Sensitive	8,680 8,680	79 S:1	0	0	0	0	0	1	1	0	1	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	7,500 9,200	594 S:2	0	0	0	0	0	2	2	0	2	0	0
Townsendia condensata cushion townsendia	G4 S3	None None	Rare Plant Rank - 2B.3	10,500 11,570	10 S:3	0	0	0	0	0	3	2	1	3	0	0
Triglochin palustris marsh arrow-grass	G5 S2	None None	Rare Plant Rank - 2B.3		18 S:1	0	0	0	0	0	1	1	0	1	0	0
Viola purpurea ssp. aurea golden violet	G5T2 S2	None None	Rare Plant Rank - 2B.2	4,600 8,040	29 S:9	1	3	0	0	0	5	0	9	9	0	0
Vulpes vulpes necator Sierra Nevada red fox	G5T1T2 S1	Proposed Endangered Threatened	USFS_S-Sensitive	7,050 10,600	201 S:11	0	0	0	0	0	11	1	10	11	0	0

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Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

39 matches found. *Click on scientific name for details*

Search Criteria

Found in Quads **3811944, 3811943, 3811934, 3811933, 3811924, 3811945, 3811935 3811925** and **3811923**;

Modify Search Criteria | Export to Excel | Modify Columns | Modify Sort | Remove Photos

Scientific Name	Common Name	Family	Blooming Period	CA Rare Plant Rank	State Rank	Habitats	Lowest Elevation	Highest Elevation	Photo
Agrostis humilis	mountain bent grass	Poaceae	Jul-Sep	2B.3	S2	• Alpine boulder and rock field • Meadows and seeps • Subalpine coniferous forest	2670 m	3200 m	2004 Steve Matson
Antennaria pulchella	beautiful pussy-toes	Asteraceae	Jun-Sep	4.3	S4	• Alpine boulder and rock field (stream margins) • Meadows and seeps	2800 m	3700 m	2014 Steve Matson
Astragalus kentrophyta var. danaus	Sweetwater Mountains milk-vetch	Fabaceae	Jul-Sep	4.3	S4	• Alpine boulder and rock field • Subalpine coniferous forest (rocky, talus)	3000 m	3660 m	2005 Steve Matson
Astragalus platytropis	broad-keeled milk-vetch	Fabaceae	Jun-Sep	2B.2	S3	• Alpine boulder and rock field • Pinyon and juniper woodland • Subalpine coniferous forest	2345 m	3550 m	2012 Steve Matson
						• Great Basin scrub			

Atriplex pusilla	smooth saltbush	Chenopodiaceae	Jun-Sep	2B.1	SH	• Meadows and seeps (hot springs)	1300 m	2000 m	no photo available
Boechera bodiensis	Bodie Hills rockcress	Brassicaceae	Jun-Jul(Aug)	1B.3	S3	• Alpine boulder and rock field • Great Basin scrub • Pinyon and juniper woodland • Subalpine coniferous forest	2085 m	3530 m	no photo available
Boechera cobrensis	Masonic rockcress	Brassicaceae	Jun-Jul	2B.3	S3	• Great Basin scrub • Pinyon and juniper woodland	1375 m	3105 m	1998 Dean Wm. Taylor
Botrychium crenulatum	scalloped moonwort	Ophioglossaceae	Jun-Sep	2B.2	S3	• Bogs and fens • Lower montane coniferous forest • Meadows and seeps • Marshes and swamps (freshwater) • Upper montane coniferous forest	1268 m	3280 m	2011 Aaron E. Sims
Carex occidentalis	western sedge	Cyperaceae	Jun-Aug	2B.3	S3	• Lower montane coniferous forest • Meadows and seeps	1645 m	3135 m	2008 Steve Matson
Carex petasata	Liddon's sedge	Cyperaceae	May-Jul	2B.3	S3	• Broadleafed upland forest • Lower montane coniferous forest • Meadows and seeps • Pinyon and juniper woodland	600 m	3320 m	2007 Dean Wm. Taylor, Ph.D.
Carex vallicola	western valley sedge	Cyperaceae	Jul-Aug	2B.3	S2	• Great Basin scrub • Meadows and seeps	1525 m	2805 m	2003 Steve Matson
						• Subalpine			

Claytonia umbellata	Great Basin claytonia	Montiaceae	May-Aug	2B.3	S1	coniferous forest (talus)	1705 m	3500 m	1995 Saint Mary's College of California
Coscinodon arctolimnius ssp. higuchii	Higuchi's sieve-tooth moss	Grimmiaceae		4.2	S1S3	• Alpine boulder and rock field	2935 m	2935 m	no photo available
Cryptantha crymophila	subalpine cryptantha	Boraginaceae	Jul-Aug	1B.3	S3	• Subalpine coniferous forest (volcanic, rocky)	2600 m	3200 m	2010 Steve Matson
Cryptantha glomeriflora	clustered-flower cryptantha	Boraginaceae	Jun-Sep	4.3	S4	• Great Basin scrub • Meadows and seeps • Subalpine coniferous forest • Upper montane coniferous forest	1800 m	3750 m	2011 Steve Matson
Dicentra nevadensis	Tulare County bleeding heart	Papaveraceae	Jun-Aug(Oct)	4.3	S4?	• Alpine boulder and rock field • Subalpine coniferous forest (gravelly or sandy, openings)	2200 m	3050 m	Charles Webber 1998 California Academy of Sciences
Draba asterophora var. asterophora	Tahoe draba	Brassicaceae	Jul-Aug(Sep)	1B.2	S2?	• Alpine boulder and rock field • Subalpine coniferous forest	2500 m	3505 m	2004 Steve Matson
Draba cana	canescent draba	Brassicaceae	Jul	2B.3	S2	• Alpine boulder and rock field • Meadows and seeps • Subalpine coniferous forest	3000 m	3505 m	2004 Steve Matson
Draba incrassata	Sweetwater Mountains draba	Brassicaceae	Jul-Aug	1B.3	S2S3	• Alpine boulder and rock field (rhyolitic talus)	2500 m	3965 m	2012 Steve Matson
Elymus scribneri	Scribner's wheat grass	Poaceae	Jul-Aug	2B.3	S3	• Alpine boulder and rock field	2900 m	4200 m	no photo available
Erythranthe marmorata	Stanislaus monkeyflower	Phrymaceae	Mar-May	1B.1	SX	• Cismontane woodland • Lower montane coniferous	100 m	900 m	no photo available

						forest			
Festuca minutiflora	small-flowered fescue	Poaceae	Jul	2B.3	S2	• Alpine boulder and rock field	3200 m	4050 m	2008 Steve Matson
Helodium blandowii	Blandow's bog moss	Helodiaceae		2B.3	S2	• Meadows and seeps • Subalpine coniferous forest	1862 m	2700 m	2002 John Game
Ivesia unguiculata	Yosemite ivesia	Rosaceae	Jun-Sep	4.2	S3	• Meadows and seeps • Subalpine coniferous forest • Upper montane coniferous forest	1500 m	2925 m	2008 Dean Wm. Taylor, Ph.D.
Kobresia myosuroides	seep kobresia	Cyperaceae	(Jun)Aug	2B.2	S2	• Alpine boulder and rock field (mesic) • Meadows and seeps (carbonate) • Subalpine coniferous forest	1490 m	3245 m	2010 Dr. Dean Wm. Taylor
Orthotrichum spjutii	Spjut's bristle moss	Orthotrichaceae		1B.3	S1	• Lower montane coniferous forest • Pinyon and juniper woodland • Subalpine coniferous forest • Upper montane coniferous forest	2100 m	2400 m	no photo available
Phacelia monoensis	Mono County phacelia	Hydrophyllaceae	May-Jul	1B.1	S2	• Great Basin scrub • Pinyon and juniper woodland	1900 m	2900 m	2010 Steve Matson
Polemonium chartaceum	Mason's sky pilot	Polemoniaceae	Jun-Aug	1B.3	S2	• Alpine boulder and rock field • Subalpine coniferous forest	3290 m	4270 m	2010 Julie Kierstead Nelson
Potamogeton zosteriformis	eel-grass pondweed	Potamogetonaceae	Jun-Jul	2B.2	S3	• Marshes and swamps (assorted freshwater)	0 m	1860 m	no photo available

Sabulina stricta	bog sandwort	Caryophyllaceae	Jul-Sep	2B.3	S3	• Alpine boulder and rock field • Alpine dwarf scrub • Meadows and seeps	2440 m	3960 m	no photo available
Senecio pattersonensis	Mt. Patterson senecio	Asteraceae	Jul-Aug(Sep)	1B.3	S3	• Alpine boulder and rock field	2900 m	3720 m	no photo available
Sidalcea multifida	cut-leaf checkerbloom	Malvaceae	May-Sep	2B.3	S2	• Great Basin scrub • Lower montane coniferous forest • Meadows and seeps • Pinyon and juniper woodland	1750 m	2800 m	2012 Barry Breckling
Sphaeromeria potentilloides var. nitrophila	alkali tansy-sage	Asteraceae	Jun-Jul	2B.2	S2	• Meadows and seeps • Playas	2100 m	2400 m	2007 Steve Matson
Sphenopholis obtusata	prairie wedge grass	Poaceae	Apr-Jul	2B.2	S2	• Cismontane woodland • Meadows and seeps	300 m	2000 m	2008 Dean Wm. Taylor, Ph.D.
Streptanthus oliganthus	Masonic Mountain jewelflower	Brassicaceae	Jun-Jul	1B.2	S3	• Pinyon and juniper woodland (volcanic or granitic, rocky)	1980 m	3050 m	Margaret Williams and CNPS
Townsendia condensata	cushion townsendia	Asteraceae	Jul-Aug	2B.3	S3	• Alpine boulder and rock field • Subalpine coniferous forest (gravelly)	2865 m	3675 m	2012 Dylan Neubauer
Trifolium dedeckerae	DeDecker's clover	Fabaceae	May-Jul	1B.3	S2	• Lower montane coniferous forest • Pinyon and juniper woodland • Subalpine coniferous forest • Upper montane coniferous forest	2100 m	3500 m	2009 Gary A. Monroe
						• Meadows and seeps • Marshes			

Triglochin palustris	marsh arrow-grass	Juncaginaceae	Jul-Aug	2B.3	S2	and swamps (freshwater) • Subalpine coniferous forest	2285 m	3700 m	2010 Louis-M. Landry
Viola purpurea ssp. aurea	golden violet	Violaceae	Apr-Jun	2B.2	S2	• Great Basin scrub • Pinyon and juniper woodland	1000 m	2500 m	2012 Steve Matson

Suggested Citation

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 15 January 2021].

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List of Technical Studies

Draft Project Report (January 2021)

Air, Noise, Hazardous Waste and Water Quality Clearance Study. (August 2020)

Aquatic Resources Delineation Report (July 2019)

Archaeological Study Report (September 2019)

Historical Property Survey Report (August 2020)

Natural Environment Study (August 2020)

Natural Environment Study Addendum (December 2020)

Stormwater Data Report (May 2017)

Visual Impact Assessment (July 2020)