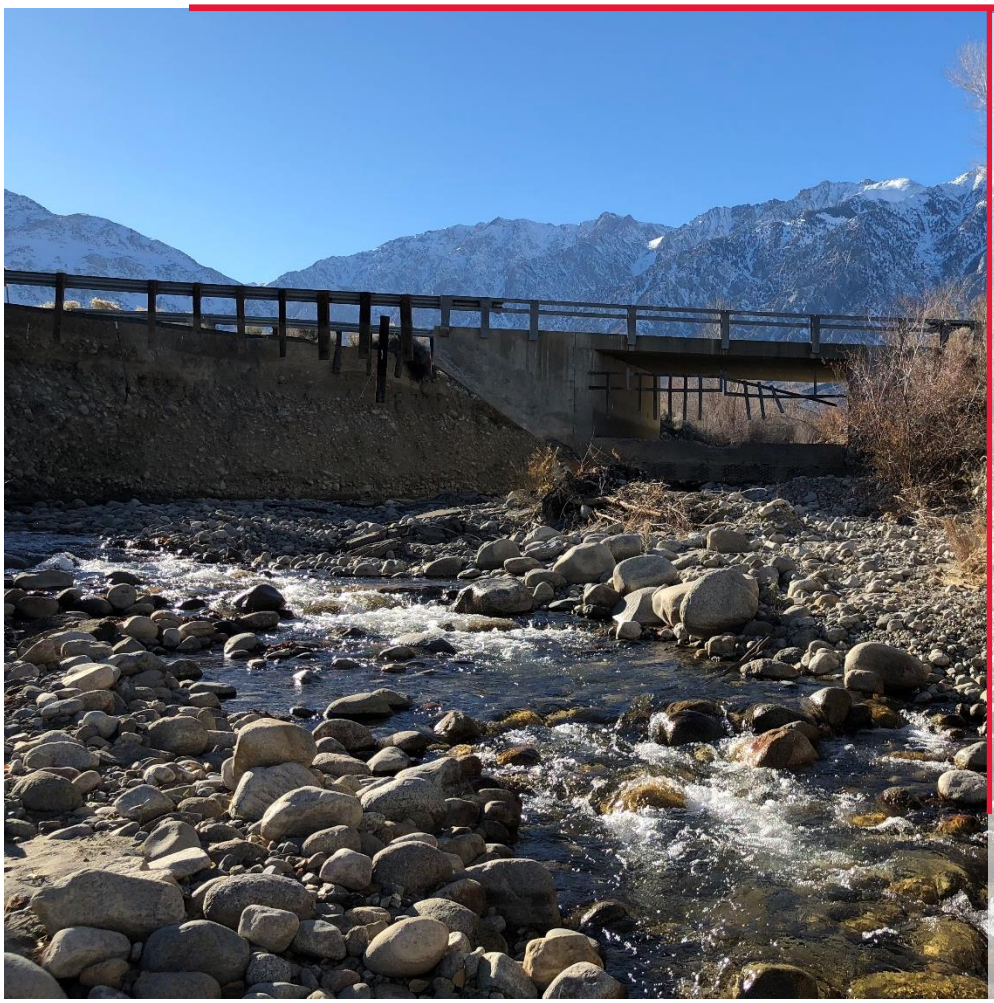
North Round Valley Road Bridge over Pine Creek Bridge Replacement Project (Bridge No. 48C0044)

CEQA - Initial Study/MND



Prepared for:

Inyo County Public Works Department

November 2019

Prepared by:

GEI Consultants

Consulting Engineers and Scientists

North Round Valley Road Bridge over Pine Creek Bridge Replacement Project (Bridge No. 48C0044)
Initial Study/Proposed Mitigated Negative Declaration

Prepared for:

CEQA Lead Agency:
Inyo County Public Works Department
168 N. Edwards
P.O. Drawer Q
Independence, CA 93526

Contact:

Ashley Helms
Associate Engineer
(760) 878.0200

Prepared by:

GEI Consultants, Inc.
2868 Prospect Park Drive, Suite 400
Sacramento, CA 95670

Contact:

Ray Weiss
Project Manager
(916) 361-4500

November 2019

Table of Contents

Tables

Figures

Appendices

Abbreviations and Acronyms

AASHTO	American Association of State Highway and Transportation Officials
ADT	Average Daily Traffic
APE	Area of Potential Effect
BMPs	Best Management Practices
CalOES	California Governor's Office of Emergency Services
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH4	Methane
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Inyo
CO2	carbon dioxide
CRHR	California Register of Historical Resources
CRS	California Road System
EIC	Eastern Information Center
EIR	Environmental Impact Report
GHGs	Greenhouse gases
IS/MND	Initial Study/proposed Mitigated Negative Declaration
IPAC	Information, Planning, and Conservation System
MLD	Most Likely Descendant
MPH	Miles per Hour
N2O	nitrous dioxide
NAHC	Native American Heritage Commission
NO_X	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
OHWM	Ordinary High Water Mark
PM_{10}	PM equal to or less than 10 micrometers in diameter
PRC	Public Resources Code
ROG	reactive organic gases
RSP	Rock Slope Protection

RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SPCP	Spill Prevention and Control Plan
SWPPP	Stormwater Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geologic Survey
WPCP	Water Pollution Control Plan

Chapter 1. Mitigated Negative Declaration

1.1 Introduction

The Inyo County Public Works Department (County) has prepared this Initial Study/proposed Mitigated Negative Declaration (IS/MND) in compliance with the California Environmental Quality Act (CEQA) and the State CEQA Guidelines to address the potentially significant environmental impacts of the proposed North Round Valley Road Bridge over Pine Creek Bridge Replacement Project (proposed project) located within the Rovana, California, U.S. Geological Survey (USGS) 7.5 Minute topographic quadrangle map. The County is the lead agency under CEQA.

To satisfy specific CEQA requirements for the proposed project, this document includes:

- a proposed MND and the environmental determination (see **Chapter 1**),
- location and description of the proposed project (see **Chapter 2**),
- initial study checklist (see **chapter 3**).

1.2 Purpose of the Initial Study

This document is an IS/MND prepared in accordance with CEQA (California Public Resources Code, Section 21000 et seq.) and the State CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations [CCR]). The purpose of this IS is to (1) determine whether proposed project implementation would result in potentially significant or significant impacts on the physical environment; and (2) incorporate mitigation measures into the proposed project design, as necessary, to eliminate the proposed project's potentially significant or significant project impacts or reduce them to a less-than-significant level. An MND is prepared if the IS identified potentially significant impacts, but: (1) revisions in the proposed project plans or proposals mitigate the impacts to a point where clearly no significant impacts would occur; and (2) there is no substantial evidence, considering the whole record before the agency, that the proposed project as revised may have a potentially significant or significant impact on the physical environment.

An IS presents environmental analysis and substantial evidence in support of its conclusions regarding the significance of environmental impacts. Substantial evidence may include expert opinion based on facts, technical studies, or reasonable assumptions based on facts. An IS is neither intended nor required to include the level of detail provided in an environmental impact report (EIR).

CEQA requires that all State and local government agencies consider the potentially significant and significant environmental impacts of projects they propose to carry out or over which they have discretionary authority, before implementing or approving those projects. The public agency that has the principal responsibility for carrying out or approving a proposed project is the lead agency for CEQA compliance (State CEQA Guidelines, CCR Section 15367). The County has principal responsibility for carrying out the proposed project and is therefore the CEQA lead agency for this IS/MND.

If there is substantial evidence (such as the findings of an IS) that a proposed project, either individually or cumulatively, may have a significant or potentially significant impact on the physical environment, the lead agency must prepare an EIR (State CEQA Guidelines, CCR Section 15064[a]). If the IS concludes that impacts would be less than significant, or that mitigation measures committed to by the County would clearly reduce impacts to a less-than-significant level, a Negative Declaration or MND can be prepared.

After the required public review of this document is complete, the County will consider all comments received on the IS/MND, the entirety of the administrative record for the project, and whether to adopt the proposed MND and a Mitigation Monitoring and Reporting Program and approve the proposed project.

1.3 Project Information

1. Project title:	North Round Valley Road Bridge over Pine Creek Bridge Replacement Project (Bridge No. 48C0044)
2. Lead agency name and address:	Inyo County Public Works Department 168 N. Edwards P.O. Drawer Q Independence, CA 93526
3. Contact person and phone number:	Ashley Helms, Associate Engineer, (760) 878.0200
4. Project location:	The proposed project site is in northwestern Inyo County, in Section 17 of the USGS 7.5-minute Rovana Quadrangle, Township 6 South, Range 31 East. The project site is accessible from North Round Valley Road, via Pine Creek Road or Birchim Lane.
5. Project sponsor's name and address:	Inyo County Public Works Department
6. General plan designation:	Natural Resource
7. Zoning:	Unclassified
8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)	Inyo County Department of Public Works (County) proposes to replace the existing North Round Valley Road Bridge over Pine Creek (Bridge No. 48C0044), which was damaged from high-velocity flows in Pine Creek. The County proposes to replace the structure with a single-span, precast/prestressed wide flange girder superstructure supported on high cantilever abutments founded on cast-in-drilled-hole concrete piles, approximately 85 feet in length. The existing horizontal and vertical alignments of North Round Valley Road will be maintained. No falsework (temporary form-work used to support the concrete until it develops strength) within locations of the creek channel will be required
9. Surrounding land uses and setting: Briefly describe the project's surroundings:	The project setting is rural in nature and the project site is composed of sagebrush scrubland, developed areas (roadway), and a perennial stream (Pine Creek). No residential land uses are located within the immediate vicinity of the project site.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)	California Department of Fish and Wildlife, Central Valley Regional Water Quality Control Board, State Water Resources Control Board, and U.S. Army Corps of Engineers.
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality.	The County has sent letters requesting AB 52 consultation to fourteen (14) representatives of several federally recognized tribes and California tribes. No responses have been received to date.

1.4 Environmental Determination

1.4.1 Summary

The County has prepared an IS to assess the potential effects of the proposed project on the environment in the project area. The analysis of potential environmental impacts from the proposed project is based on data gathered for this project and other projects within the project vicinity. **Chapter 3** of this document contains the analysis and discussion of potential environmental impacts of the proposed project. Based on the issues evaluated in that chapter, it was determined that:

The proposed project would result in ***no impacts*** on the following issue areas:

- Agriculture and Forestry Resources
- Energy
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Recreation
- Public Services/Utilities and Service Systems
- Transportation

The proposed project would result in ***less-than-significant*** impacts on the following issue areas:

- Aesthetics

- Geology and Soils
- Greenhouse Gas Emissions

The proposed project would result in ***less-than-significant impacts*** after ***mitigation*** implementation on the following issue areas:

- Air Quality
- Biological Resources
- Cultural Resources
- Hazards/Hazardous Materials and Wildfire
- Hydrology and Water Quality
- Tribal Cultural Resources

1.4.2 Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

AHelms — Signature

11/4/19 — Date

Ashley Helms — Print Name

Associate Engineer — Title

Inyo County Public Works Department — Agency

Chapter 2. Project Description

This chapter provides additional details on the proposed project, including the project location, background, project objectives, proposed construction activities, and a summary of discretionary actions and approvals that may be required to implement the project.

2.1 Project Location and Site

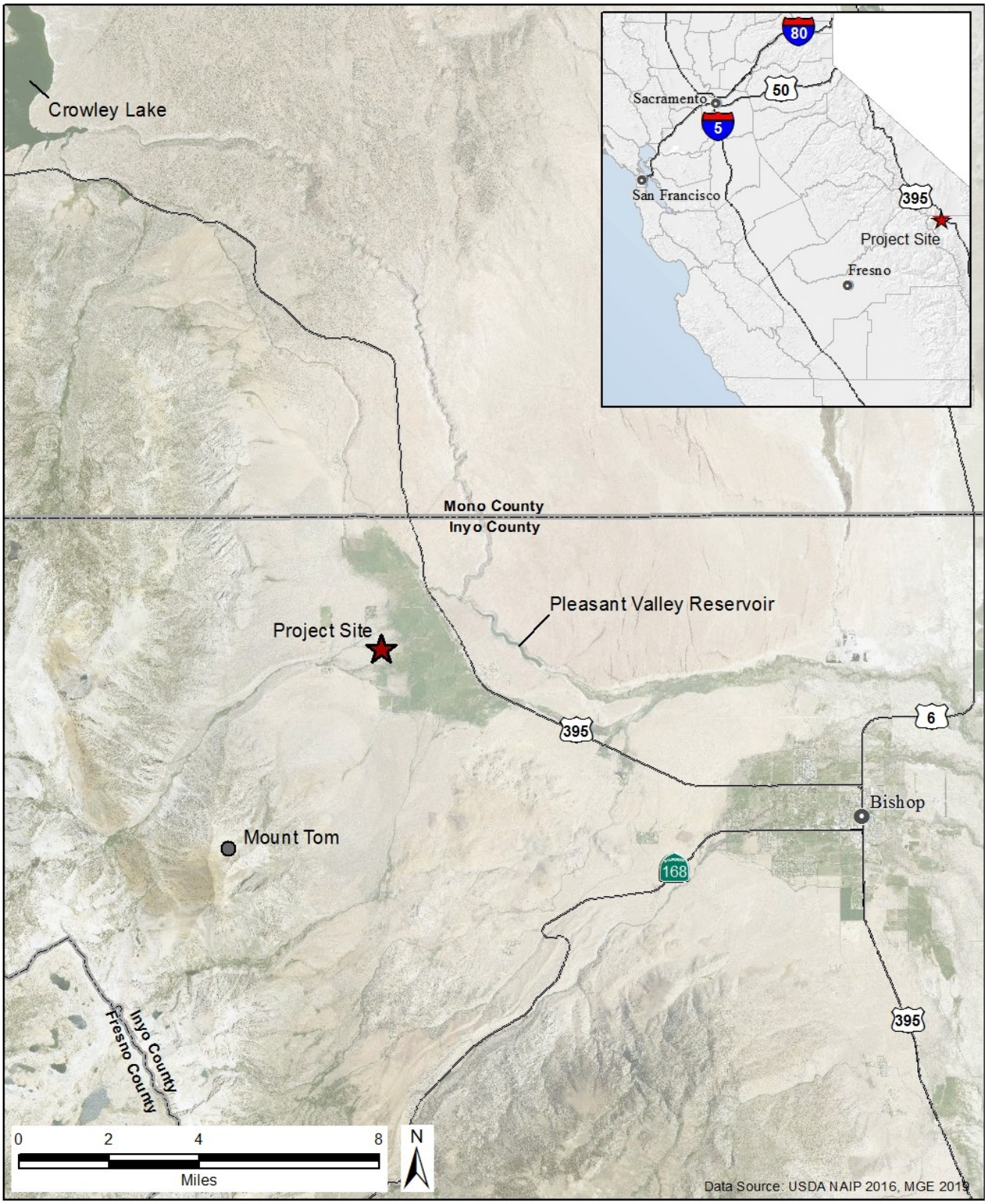
The project site is located in Inyo County and accessible from North Round Valley Road, via Pine Creek Road or Birchim Lane. The site is west of U.S. Route 395, which provides regional access (see **Figures 2-1** and **2-2**). Bishop is the nearest incorporated city, located approximately 10 miles to the southeast. The project site encompasses 2.85 acres and is in Section 17 of the USGS 7.5-minute Rovana Quadrangle, Township 6 South, Range 31 East. Natural features include Pine Creek, which the proposed project crosses.

2.2 Project Background

The Pine Creek drainage basin delineated at Round Valley Road discharges approximately 37 square miles. The creek is primarily fed by snow melt and is also subject to high flows during high intensity precipitation events. On October 27, 2017, a state of emergency was declared in Inyo and Mono Counties, as a result of severe winter storms and exceptional snowfall, leading to snowmelt that damaged critical infrastructure. These runoff conditions and high-velocity flows in Pine Creek also resulted in failure of the North Round Valley Road Bridge.

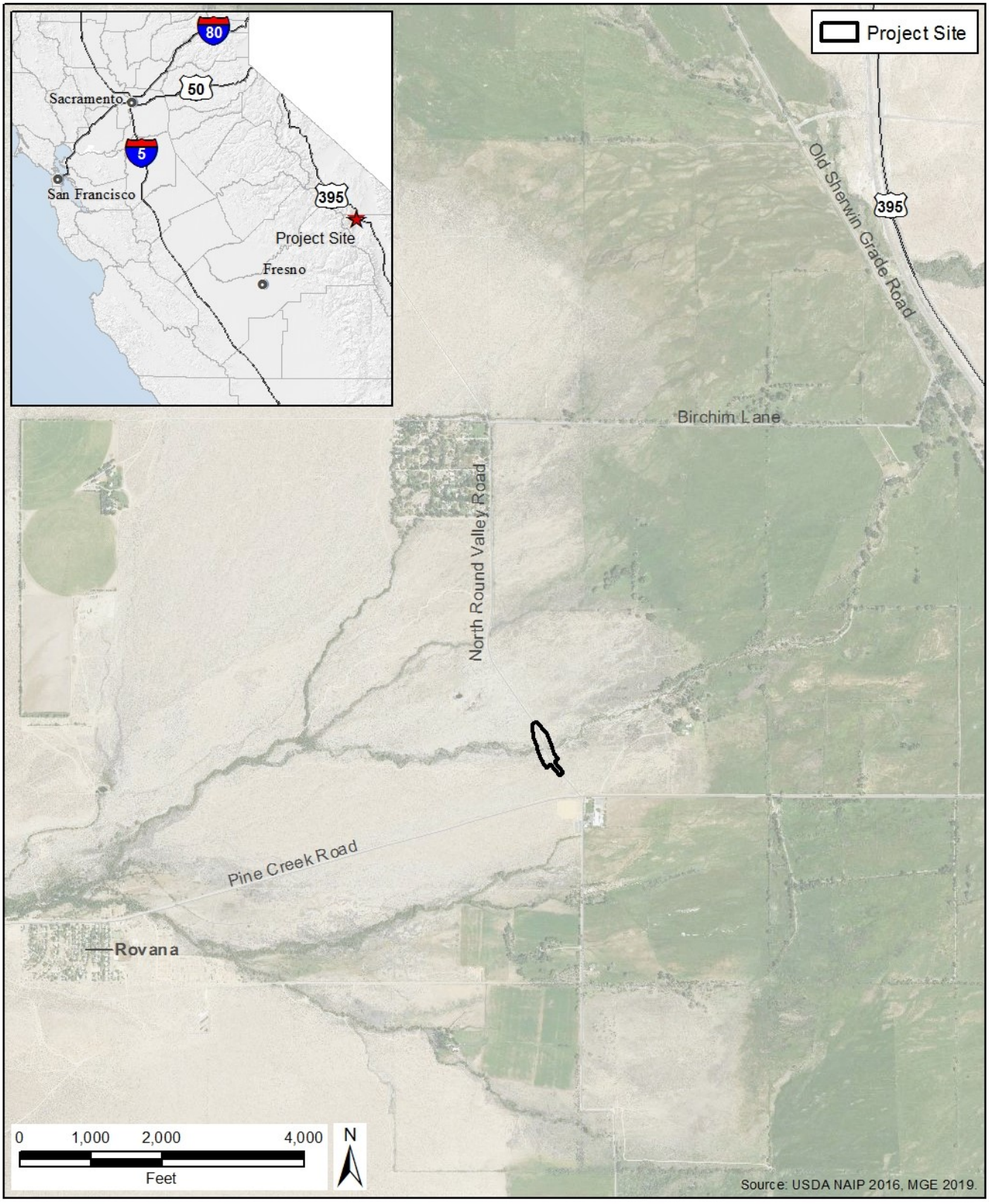
On October 27, 2017, the Governor of the State of California signed a Proclamation of a State of Emergency for both Inyo and Mono Counties, due to these severe winter storms and the resultant damage to critical roadway and bridge infrastructure. In anticipation of this emergency proclamation, the Inyo County Board of Supervisors adopted Resolution #2017-15 (dated March 28, 2017 and amended June 27, 2017) which also proclaimed the threatened existence of a local emergency resulting from the run-off potential of near-record snowpack in the Eastern Sierra. While the proposed project is consistent with the intent of this County resolution and meets the Statutory Exemption (Article 18) requirements consistent with CEQA Guidelines 15269 for Emergency Projects, the County has determined that preparation of this IS/MND is still necessary to disclose the environmental impacts of the proposed project, consistent with CEQA Guidelines. The proposed project will also comply with all other state, local or federal laws that may be applicable to the project (see "Required Regulatory Permits" below).

Figure 2-1. Regional Location Map



Z:\Projects\1803488_RoundValleyBridge\1803488_G014_RegionalLocation_TechMemo.mxd
26FEB2018 BMC

Figure 2-2. Project Location Map



Z:\Projects\1803488_RoundValleyBridge\1803488_G013_SiteAndVicinity_TechMemo.mxd
05JULY2019 BMC

2.3 Existing Bridge and Roadway

The existing North Round Valley Road Bridge (Bridge Number 48C0044), built in 1987, is a single-span, cast-in-place, reinforced concrete slab superstructure supported on cantilever abutments and spread footings. The bridge provides a clear hydraulic opening of approximately 21'-5". The structure has a total length of 25'-6 3/4" and a clear roadway width of 32-feet between metal tube bridge railings.

The bridge is currently closed due to high velocity flows that occurred in June and July of 2017 that eroded approximately 50-feet of the south approach roadway behind the abutment. In addition to the eroded south approach, both existing abutment foundations were undermined due to scour, as native soil at this location is highly erodible. Pine Creek now flows behind the south abutment where the approach roadway was washed out. To reduce the future risk of the embankments eroding from high velocity flows, the replacement bridge will need to be significantly longer than the existing bridge. In addition, rock slope protection (RSP) will be used to armor both abutment embankments. The replacement of the existing bridge is being funding through the State of California Governor's Office of Emergency Services (CalOES).

North Round Valley Road is a paved road and according to the California Road System (CRS) Maps, it is designated as a Minor Collector Road. Prior to the roadway closure, average daily traffic (ADT) was likely less than 500 vehicles.

2.4 Purpose and Need

Specific objectives of the proposed project are to replace the existing flood-damaged North Round Valley Road Bridge with a new structure that:

- Accommodates safe vehicular travel and pedestrian access;
- Provides a slightly longer structure to accommodate the widened creek conditions and to protect the replacement structure against future instability; and
- Minimizes environmental impacts to local resources.

2.5 Environmental Setting

Topography on the project site slopes gently toward the east. Elevation at the project site is approximately 4,670 feet above mean sea level. Natural features include Pine Creek, which the proposed project crosses. Pine Creek headwaters are located high in the Sierra Nevada, east of Royce Peak and southwest of the project site. Pine Creek confluences with Pleasant Valley Reservoir, an impoundment of the Owens River, east of U.S. Route 395.

2.5.1 Surrounding Land Uses

Land uses surrounding the project site are comprised of open space uses (comprised primarily of sagebrush scrubland), developed areas (i.e., Round Valley Road and Bridge), and a perennial stream (Pine Creek). No residential land uses are located adjacent or near the project site.

2.5.2 Land Use Designations and Zoning

The project site is designated as Natural Resource and zoned as unclassified under the Inyo County General Plan. No lands in the study area are designated or zoned for Agriculture Preserve, Timber Lands, or are associated with an executed Williamson Act contract.

2.6 Proposed Project

2.6.1 Bridge Design

The replacement structure will be a single-span, precast/prestressed wide flange girder superstructure on high cantilever abutments founded on cast-in-drilled-hole concrete piles, approximately 85 feet in length (see **Figure 2-3**). The existing horizontal and vertical alignments of North Round Valley Road will be maintained. Bridge barriers proposed consist of California Department of Transportation standard California ST-75 open bridge railing. No falsework (temporary form-work used to support the concrete until it develops strength) will be required within locations of the creek channel.

2.6.2 Bridge Abutments

Construction of the new bridge abutments will require two relatively deep excavations. Excavations may need to be stabilized with temporary shoring and will likely need to be de-watered for footing concrete placement. Abutment footing areas are estimated to be approximately 40 feet long by 12 feet wide by 3 feet thick.

2.6.3 Vertical Profile

Water surface elevations are low enough that the existing profile grade of the bridge will not need to be raised. The California Department of Transportation's Highway Design Manual requires the fifty-year (Q50) event to pass under the soffit with a minimum 2-feet of freeboard and pass the 100-year (Q100) event. The proposed bridge exceeds the freeboard requirements for both the 50-year and 100-year events.

2.6.4 Roadway Approaches, Railing, and Bridge Width

The existing approach roadway widths vary from approximately 22 to 24-feet. Approach roadways will be tapered down from the 32-foot clear bridge width to match existing roadway widths on each side of the bridge (see **Figure 2-3**). As the proposed project maintains the existing profile grades, the approach roadway work will be limited to reconstructing portions of both approach roadways (roughly 120 feet in each direction) from the bridge. All four corners of the bridge will require California Department of Transportation standard transition railings and terminal systems as the bridge clear width is less than 40-feet. Road improvements will be designed to at least meet the American Association of State Highway and Transportation Officials (AASHTO)'s Policy on Geometric Design of Highways and Streets (Greenbook) as well as AASHTO's Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT<400).

2.6.5 Utilities

Overhead telephone and power lines are located approximately 150 to 170-feet east of the existing roadway centerline, and thus will not interfere with the proposed construction, as they are located outside the project's area of direct impact. No utilities are required to be carried on the proposed project.

2.6.6 Right of Way

Existing information indicates that north of the bridge the right-of-way is 60-feet wide versus a 40-foot wide right-of-way south of the bridge. Some permanent right-of-way acquisition will be required on the east and west side of the bridge due to the placement of rock slope protection materials. Temporary construction easements will be needed to allow contractor access into the channel.

2.6.7 Construction Approach, Staging Areas, and Traffic Diversion

Overall, project construction activities are anticipated to occur during the summer and fall months when water levels are at their lowest levels. **Table 2-1** (see below) identifies the anticipated timing and duration of the primary construction activities anticipated with this project. Construction staging areas will be located on the bridge approaches (see **Figure 2-4**). Traffic will continue to be detoured around the bridge site on North Round Valley Road during construction. Existing detour signs will be maintained for the duration of construction.

It is anticipated that excavators, dozers, cranes, pavers, dump trucks, concrete trucks, and concrete pumps may be required to demolish and construct the proposed project.

Table 2-1. Proposed Construction Work Order and Schedule

Activity	Approximate Duration	Estimated Dates
Clearing and grubbing	1 week	May
Install environmental fencing	1 week	June
Water diversion (if necessary)	1 week	June
Remove bridge	1 week	June
Construct bridge		Mid to Late Summer
Footing construction at abutments	2 weeks	
Abutment construction	4 weeks	
Place precast/prestressed CA wide flange girder superstructure	1 weeks	
Finish bridge deck and complete barriers	8 weeks	
Install erosion control/scour countermeasures	2 weeks	Early Fall
Reconstruct approaches	3 weeks	Late Summer/Early Fall

2.6.8 In Channel Work and Temporary Creek Diversion

Implementation of the proposed project will not involve permanent modifications to the Pine Creek channel. However, bridge demolition and new bridge construction will require temporary access to the creek channel to remove the existing bridge pier/abutments, installation of new bridge abutments, and for the placement of new rock slope protection at the abutments. Creek access will be limited to 80 feet in each direction from the roadway centerline. Depending on creek flows, a temporary creek diversion system may be necessary during both demolition of the existing bridge and the construction of the new bridge. The water diversion system may include sump pumps to remove water from the abutment excavations and a temporary pipe or culvert (plastic or metal covered with gravel) network through the site (50 to 60 feet in length) to route flow through and around the immediate work area, maintain dewatered conditions, and return flow to the downstream channel network without causing harm to

biological resources or affecting water quality. Sand bags and plastic sheeting would be used to direct creek water to the culvert network. Impacted waters located in the work area would either be treated per Stormwater Pollution Prevention Plan (SWPPP)/Water Pollution Control Plan (WPCP) requirements or disposed of per Regional Water Quality Control Board (RWQCB) requirements.

2.6.9 Scour Counter Measures

The geotechnical investigation prepared for the proposed project indicates that soils within the study area are highly susceptible to scour, with high channel velocities at the bridge crossing expected to result in bank and abutment scour in exceedance of 5 feet. Revetment (such as rock slope protection) will be installed around both sides of the bridge abutments (see **Figure 2-3**), extending approximately 30 feet upstream and 40 feet downstream of the edges of the bridge, to prevent loss of bank material.

2.6.10 Erosion Control

The contractor would be required to install temporary BMPs to control any runoff or erosion from the project site into the surrounding waterways. These temporary BMPs would be installed prior to any construction operations and would remain in place for the duration of the construction period. The removal of these BMPs would be the final operation, along with project site cleanup and restoration.

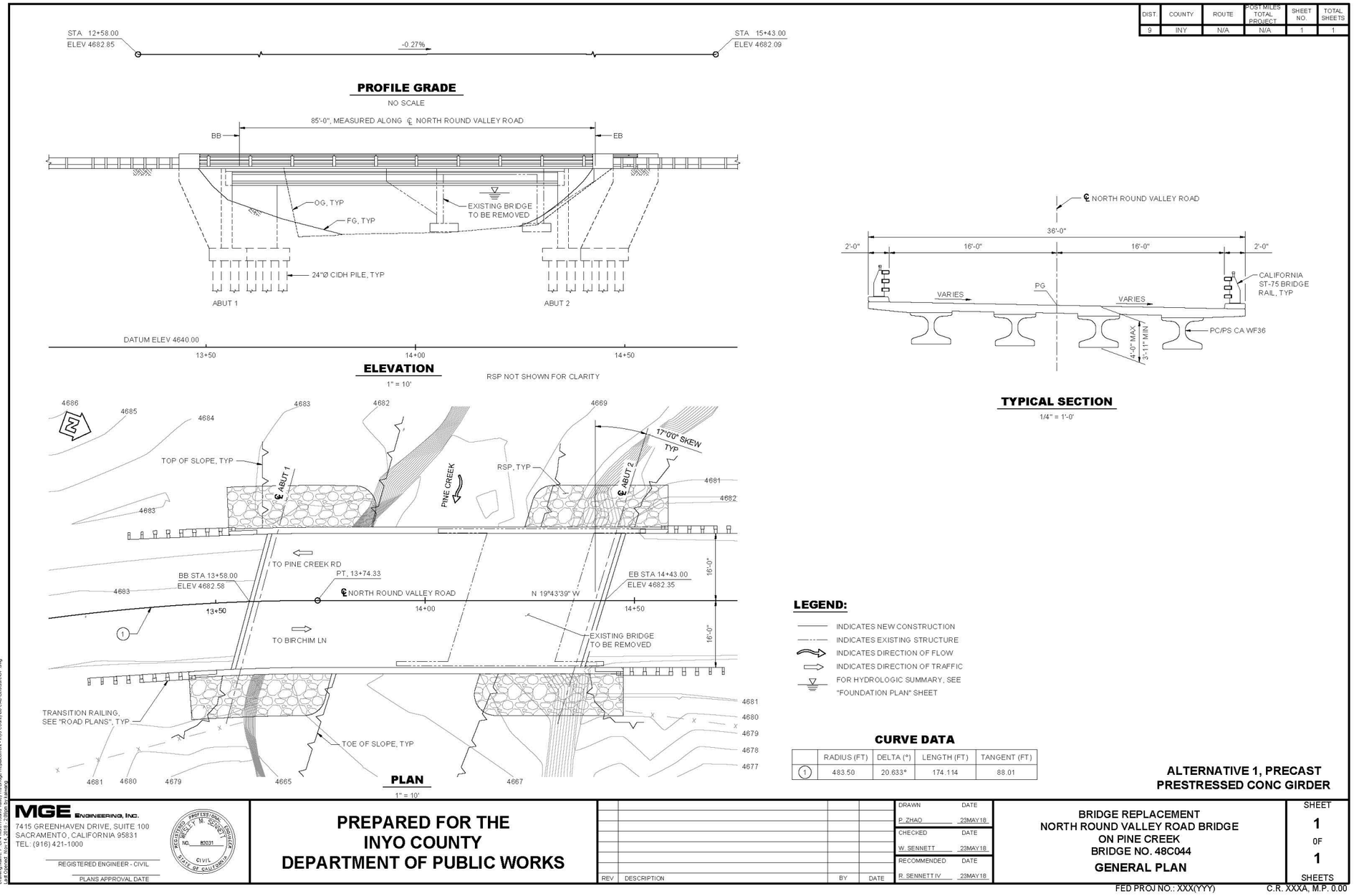
2.7 Regulatory Requirements, Permits, and Approvals

As the lead agency under CEQA, the County has the principal responsibility for approving and carrying out the proposed project and for ensuring that CEQA requirements and all other applicable regulations are met. Other agencies that may have permitting approval or review authority over portions of the proposed project are listed below:

- **California Department of Fish and Wildlife**—Section 1602 streambed alteration agreement; California Endangered Species Act compliance
- **Central Valley Regional Water Quality Control Board**—Clean Water Act Section 401 Certification; and Clean Water Act Section 402 National Pollutant Discharge Elimination System storm water permit for general construction
- **U.S. Army Corps of Engineers**—Department of the Army, Clean Water Act Section 404 Permit for discharge of fill to Waters of the U.S.

This page intentionally left blank.

Figure 2-3. Cross Section and Design Details for the Proposed Project



CURVE DATA

	RADIUS (FT)	DELTA (°)	LENGTH (FT)	TANGENT (FT)
1	483.50	20.633°	174.114	88.01

ALTERNATIVE 1, PRECAST PRESTRESSED CONC GIRDER

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
9	INY	N/A	N/A	1	1

MGE ENGINEERING, INC.
7415 GREENHAVEN DRIVE, SUITE 100
SACRAMENTO, CALIFORNIA 95831
TEL: (916) 421-1000

REGISTERED ENGINEER - CIVIL
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — WILLIAM M. SENNETT — NO. 80031 — CIVIL — STATE OF CALIFORNIA

PREPARED FOR THE INYO COUNTY DEPARTMENT OF PUBLIC WORKS

REV	DESCRIPTION	BY	DATE

		DATE
DRAWN	P. ZHAO	23MAY18
CHECKED	W. SENNETT	23MAY18
RECOMMENDED	R. SENNETT IV	23MAY18

BRIDGE REPLACEMENT
NORTH ROUND VALLEY ROAD BRIDGE
ON PINE CREEK
BRIDGE NO. 48C044
GENERAL PLAN

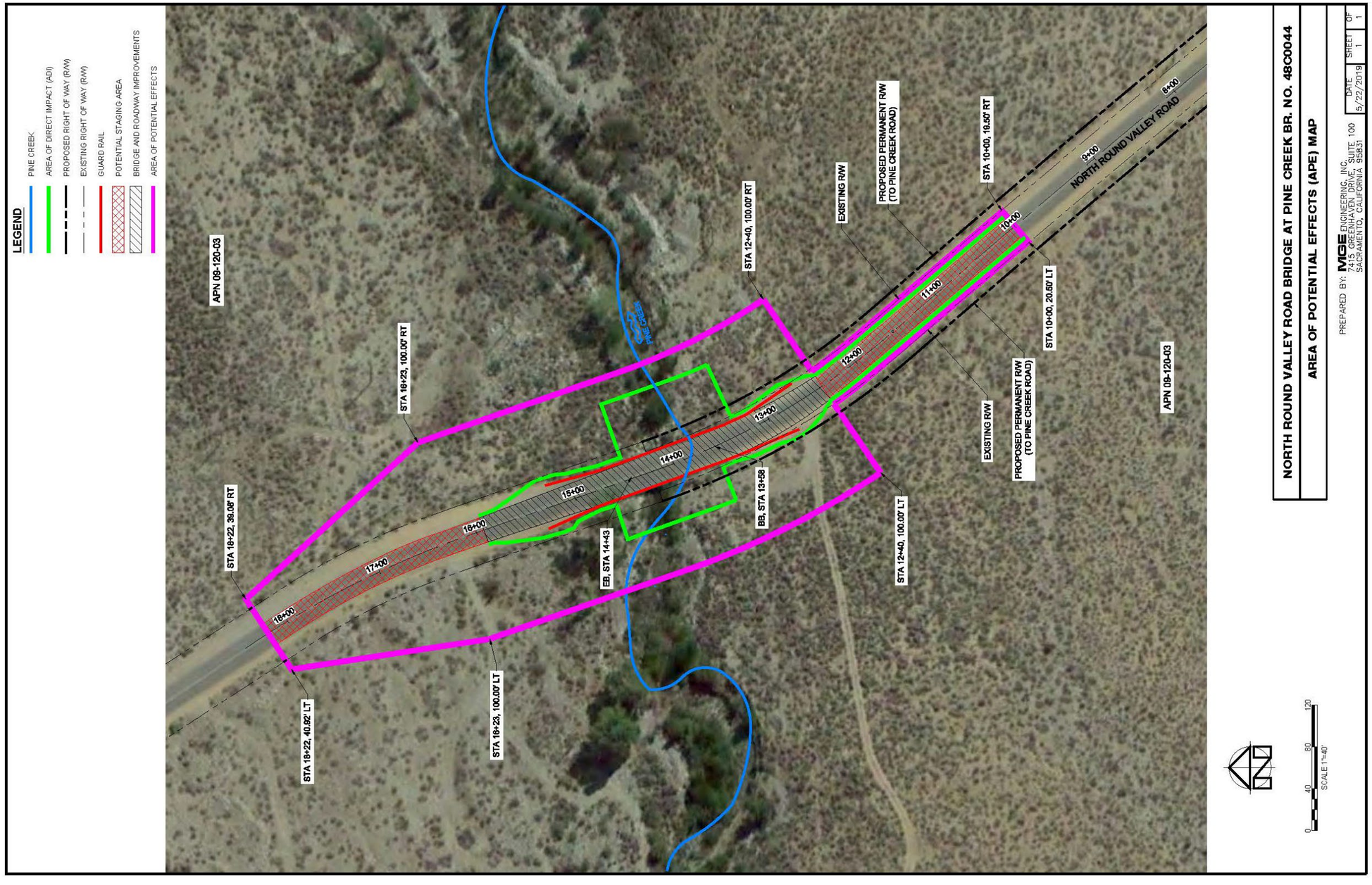
SHEET 1 OF 1 SHEETS

FED PROJ NO.: XXX(YYY) C.R. XXXA, M.P. 0.00

Drawing Name: P:\074 North Round Valley Rd Bridge Replacement - Inyo County\06 CAD\Structure\GP.dwg
Last Modified: Mon 14, 2018 - 2:05pm By: zzhang

Source: Prepared by MGE Engineering, Inc., 2019

Figure 2-4. Proposed Project Site Plan (and Area of Potential Effect)



Source: Prepared by MGE Engineering, Inc., 2019

Chapter 3. Initial Study Checklist

3.1 Introduction

In compliance with the CEQA Guidelines, the County has prepared the following initial study checklist to analyze the environmental impacts of the proposed project. This checklist uses Appendix G of the CEQA Guidelines to provide a basis for the analysis of the resource areas addressed. An evaluation of potential impacts and mitigation measures to reduce potentially significant impacts is presented in the analysis.

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. However, all impacts would be mitigated to a less than significant level as indicated on the following pages.

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

3.2 Evaluation of Environmental Impacts

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts. Operations and maintenance impacts of the proposed project are routine, minimal, and essentially the same as current operations and maintenance of the existing facilities. There is no potential for a significant impact to any resource category from project operations and maintenance of the existing and proposed facilities.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required. “Beneficial impact” is also identified where appropriate to provide full disclosure of any benefits from implementing the proposed project.

4) "Less-than-Significant Impact with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-than-Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less-than-significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration (Section 15063[c][3][D]). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are a "Less-than-Significant Impact with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Significance thresholds are identified for certain resources, but others are not explicitly identified because there is clearly no impact or the checklist question itself serves as the significance threshold.

3.3 Aesthetics

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

3.3.1 Discussion

a) Have a substantial adverse effect on a scenic vista?

Implementation of the proposed project will require the removal of some vegetation along Pine Creek; however, replanting (using native vegetation) and erosion control measures (see **Section 3.6** "**Biological Resources**") would be completed as part of the project to restore the construction site to pre-project conditions. While the project will result in short-term, construction-related visual impacts (i.e., dust, equipment, construction vehicles), no vertical features (such as cellular towers, storage tanks, or utility lines) or new sources of lighting are included with the project that would result in permanent negative effects to existing open space views in the study area. Therefore, the project will not result in a negative adverse impact to a scenic vista or the visual character of the site. Consequently, this impact is ***less-than-significant***, with no additional mitigation measures required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?

The project site is not located on or near a state designated scenic highway and will not result in damage to scenic resources within a state scenic highway. Consequently, ***no impact*** would occur.

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 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?

See checklist Item "**a**" above.

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

See checklist Item "**a**" above. Consequently, ***no impact*** would occur.

3.4 Agriculture and Forestry Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
II. AGRICULTURE AND FORESTRY RESOURCES.					
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the State's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. **Would the project:**					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC 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?	☐	☐	☐	☒	☐

3.4.1 Discussion

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?

The project site does not contain any Important Farmlands as identified by the California Department of Conservation's Farmland Mapping and Monitoring Program, parcels with an active Williamson Act contract, or lands designated as Forest or Timberlands. Additionally, the project would replace an existing bridge, with construction activities concentrated within and directly adjacent to the existing roadway, thus remaining consistent with existing development and current zoning and land use designations. Therefore, the project will not result in the conversion of Important Farmland, Timberland/Forest resources or is expected to encourage the non-renewal or cancellation of Williamson Act contracted lands. Consequently, ***no impact*** would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

See checklist Item "**a**" above.

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 PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

See checklist Item "**a**" above.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

See checklist Item "**a**" above.

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?

See checklist Item "**a**" above.

3.5 Air Quality

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

3.5.1 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

This impact is determined based on whether the proposed project would conflict with or obstruct implementation of the applicable air quality plan and/or applicable portions of the State Implementation Plan, which would lead to increases in the frequency or severity of existing air quality violations. As a bridge replacement project (with the primary objective of maintaining public safety, the proposed project would not increase roadway capacity or service capabilities that would induce unplanned growth, remove an existing obstacle to growth, or lead to permanent increases in vehicle miles travelled by existing motorists. Therefore, the proposed project would not conflict with or obstruct implementation of the applicable air quality plan. Consequently, this impact is ***less-than-significant***, with no mitigation measures required.

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?

The project site is in a region designated as nonattainment for ozone and particulate matter equal to or less than 10 micrometers in diameter (PM10) under state standards and nonattainment for PM10 under federal standards. While air quality estimates or modelling were not generated for this project, it is assumed that combustion-related emissions, some of which are precursors to ozone, would be well below South Coast Air Quality Management District (SCAQMD) significance thresholds and would have minimal impact on ambient air quality at the project site or in the region, based on a review of similar bridge replacement projects in the County. However, the proposed project may generate construction-related diesel exhaust and dust that

could impact air quality in the region. Fugitive dust would also be generated from use of vehicles and equipment as well as during earth-moving activities. Impacts to air quality from emissions generated during construction would be relatively short and limited to the 5/6-month construction period; however, the proposed project's contribution of fugitive dust and ozone precursors to the region, which is in nonattainment may be ***potentially significant***. Implementation of **Mitigation Measure AIR-1** requires implementation of dust and engine emissions control measures, which would reduce the impact to less than significant. Therefore, the proposed project would have a ***less-than-significant*** impact with mitigation incorporated.

Mitigation Measure AIR-1: Dust and Engine Emissions Control Measures
Inyo County shall ensure that the construction contractor will comply with District Rule 401 regulations. In addition to reasonable precautions outlined in Rule 401, the following measures shall be incorporated during the demolition and installation of the bridge and realigned roadway approaches:

1. Water or dust palliatives shall be applied on dirt roads, material stockpiles, and other surfaces that could give rise to airborne dust and are subject to disturbance.

2. Water or dust palliatives shall be applied to prevent particulate matter from becoming airborne during the transportation or stockpiling of dusty materials.

3. Trucks hauling material shall be covered during transit.

4. Roadways shall be maintained in a clean condition.

5. Vehicles shall be limited to 15 miles per hour (mph) on unpaved roads, to the extent feasible.

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]).

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer 's specifications. All equipment shall be checked by a certified visible emissions evaluator.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

c) Expose sensitive receptors to substantial pollutant concentrations?

No sensitive receptors are located near the project site or would be exposed to substantial pollutant concentrations. Consequently, ***no impact*** would occur.

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

No objectionable odors would be generated from project construction activities or from use of the proposed bridge. Consequently, ***no impact*** would occur.

3.6 Biological Resources

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

3.6.1 Discussion

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

A Biological Resources Technical Report (GEI, 2019a) and a Preliminary Delineation of Waters of the United States, Including Wetlands Report (GEI, 2019b) were prepared for the County to evaluate site conditions and potential impacts to sensitive habitats, biological, and botanical species from project activities. Other primary references consulted include species lists and

information gathered using United States Fish and Wildlife Service's (USFWS), Information, Planning, and Conservation System (IPAC), California Department of Fish and Wildlife's (CDFW) Natural Diversity Database (CNDDB), the California Native Plant Society's (CNPS) list of rare and endangered plants, and literature review. The conclusions of the reports are the result of field survey findings and research to determine the potential of special-status species to occur within the study area, and/or if these species could be impacted by project activities. The following information is summarized from the Biological Resources Technical Report and the report is included as **Appendix A**.

Implementing the proposed project would not result in tree removal or permanent conversion of sagebrush habitat. Developed road shoulders and adjacent sagebrush scrubland are areas where equipment and materials may be temporarily staged. Impacts of the proposed project on biological resources could result from vegetation removal and grading during construction. In-water work could result in temporary disturbance to aquatic biological resources. In general, terrestrial impacts are anticipated to be relatively minor, because project implementation would be restricted to the developed surfaces along North Round Valley Road and sagebrush scrub habitat located adjacent to the road.

In-water construction would be restricted to periods of low-flow, most likely beginning in June. In-water construction activities include removing the existing failed bridge and constructing new abutments in the Pine Creek channel. Because Pine Creek is a perennial channel, dewatering is required to complete project construction.

Special-status Species – Birds

Four special-status bird species—golden eagle, bald eagle, Swainson's hawk, and bank swallow––have low or moderate potential to occur on or adjacent to the project site (see **Table 2**, Biological Resources Technical Report, **Appendix A**). All of these species are known or likely to occur in the general region, but potential for most of them to occur onsite is likely limited to foraging and/or roosting. The project site and immediately adjacent areas provide limited potential nesting habitat for large raptors; only two large-diameter Cottonwood trees are present along the north bank of Pine Creek, and few large trees are present along other nearby portions of the creek. Stick nests were not observed in trees on or near the project site during the December field survey, when trees were devoid of leaves and nests would have been readily observable. In the unlikely event an active Swainson's hawk nest is present on or adjacent to the project site during demolition and construction activities, nesting birds could be disturbed to an extent that results in nest failure. The CNDDB contains few records for the species nesting in Inyo County, indicating that the population is small, and the loss of a single nest would result in a substantial adverse effect on the species. Implementation of **Mitigation Measure BIO-1** requires implementation of preconstruction and species avoidance measures, which would reduce the impact to less than significant. Therefore, the proposed project would have a ***less-than-significant*** impact with mitigation incorporated.

Mitigation Measure BIO-1: Avoid and Minimize Effects to Nesting Swainson's Hawk. Inyo County shall ensure the construction contractor implement the following measures to avoid and minimize potential adverse effects on nesting Swainson's hawk during project construction.

1. Preconstruction surveys for active Swainson's hawk nests shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 0.25-mile of project disturbance. A minimum of one survey shall be conducted no more than 14 days before project activities commence.

2. Appropriate buffers shall be established and maintained around active nest sites to avoid nest failure from project activities. The appropriate size and shape of the buffers shall be determined by a qualified biologist and may vary depending on the nest location, nest stage, and construction activity. The buffers may be adjusted if a qualified biologist determines it would not be likely to adversely affect the nest. Monitoring shall be conducted to confirm that project activities are not resulting in detectable adverse effects on nesting birds or their young. No project activities shall commence within the buffer areas until a qualified biologist determines that the young have fledged, or the nest site is otherwise no longer in use.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

The project site and vicinity lack suitable nesting habitat for bank swallow. Implementation of the proposed project would result in the loss of a very small amount of temporal foraging habitat loss for one season but would not substantially reduce the overall populations or distribution of any special-status bird species. However, it is recommended that **Mitigation Measure BIO-2** be implemented to avoid and minimize destruction of active bird nests and potential violation of FGC Section 3503 during project construction. Implementation of the construction worker awareness training practices, revegetation measures, and invasive plant avoidance measures identified in **Mitigation Measures BIO-3**, **BIO-4**, and **BIO-5** are also recommended to minimize related species and habitat impacts.

Mitigation Measure BIO-2: Pre-Construction Bird Surveys

Inyo County shall ensure the construction contractor implement the following measures to avoid and minimize destruction of active bird nests and potential violation of FGC Section 3503 during project construction:

1. If vegetation removal must occur during the migratory bird nesting season (March 15 through July 31), surveys for active bird nests shall be conducted by a qualified biologist in areas of suitable nesting vegetation designated for removal. If active nests are found, removal of vegetation in which the nests are located will be delayed until a qualified biologist determines that the young have fledged, or the nest site is otherwise no longer in use.

2. Preconstruction surveys for active nests of common raptor species shall be conducted by a qualified biologist. Surveys for raptor nests shall include suitable habitat within up to 300 feet of areas subject to project disturbance, depending on the potential extent of indirect impact. Surveys shall be conducted within 14 days before commencement of any construction activities that occur during the raptor nesting season (March 15 to July 31) in a given area.

3. If any active nests, or behaviors indicating active nests are present, are observed, appropriate buffers around the nest sites shall be determined by a qualified biologist to avoid nest failure resulting from project activities. Buffer size shall depend on the species, nest location, nest stage, and specific construction activities to be performed while the nest is active. The buffers may be adjusted if a qualified biologist determines it would not be likely to adversely affect the nest. If buffers are adjusted, monitoring shall be conducted to confirm that project activity is not resulting in detectable adverse effects on nesting birds or their young. No project activity shall commence within the buffer areas until a qualified biologist determines that the young have fledged, or the nest site is otherwise no longer in use.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

Mitigation Measure BIO-3: Conduct Environmental Awareness Training Regarding Special-status Species and Sensitive Habitats prior to Construction

Inyo County shall ensure the construction contractor will implement the following actions before and during construction activities:

Before any work occurs in the proposed project footprint, including grading and equipment staging, all construction personnel shall participate in an environmental awareness training regarding special-status species and sensitive habitats present in the project limits. The training shall describe sensitive resources (i.e., waters of the U.S. and state, riparian habitat, special-status species and habitat, nesting birds/raptors) to be avoided during project construction and applicable permit conditions identified by state and federal agencies to protect these resources. If new construction personnel are added to the project, they must receive the mandatory training before starting work. After being trained, each construction person shall sign-in to document they received the training.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

Mitigation Measure BIO-4: Return Temporarily Disturbed Areas to Pre-Project Conditions

The County shall ensure the construction contractor will implement the following actions before and during construction activities:

All temporarily disturbed areas shall be returned to pre-project conditions within one year following completion of construction/maintenance. These areas shall be properly protected from washout and erosion using appropriate erosion control devices including coir netting, hydroseeding, and revegetation.

Responsibility: County of Inyo / Construction Contractor

Timing: During and After Construction Activities

Mitigation Measure BIO-5: Avoid the Spread of Invasive Plant Species

The County shall ensure the following mitigation measures shall be implemented, as appropriate, to avoid the spreading of invasive plant species throughout the project site during construction and maintenance activities, particularly in riparian areas:

1. All hay, straw, hay bales, straw bales, seed, mulch, or other material used for erosion control or landscaping on the project site, and all material brought to the site, including rock, gravel, road base, sand, and top soil, shall be free of noxious weed seeds and propagules. Noxious weeds are defined in Title 3, Division 4, Chapter 6, Section 4500 of the California Code of Regulations and the California Quarantine Policy – Weeds. (Food and Agriculture Code, Sections 6305, 6341 and 6461)

2. All equipment brought to the project site for construction shall be thoroughly cleaned of all dirt and vegetation prior to entering the site to prevent importing noxious weeds. (Food and Agriculture Code, Section 5401)

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

Special-status Species – Mammals

Three special-status bat species—pallid bat, Townsend big-eared bat, and spotted bat have the potential to forage over the project site, but roosting habitat is absent from the project site and immediate vicinity. Foraging activities are unlikely to be disturbed by construction activities. Areas of rock outcrops near the toe slope of Wheeler Mountain may support colonial bat roost sites, but project activities are unlikely to create enough disturbance to disrupt bats that may roost in such areas, located over 3 miles away. The existing failed bridge structure is concrete slab and lacks cracks or openings on the underside of the bridge deck that could serve as bat rooting habitat. Existing mature trees on the project site are unlikely to provide habitat for roosting colonies due to the limited amount of habitat present, but they could be used as temporary roost sites for small numbers of individuals. Potential disturbance of small numbers of roosting bats that may be present onsite would not result in a substantial adverse effect to local or regional populations of either species. Therefore, the proposed project would have a ***less-than-significant*** impact on special-status bats.

Western white-tailed jackrabbit and Sierra Nevada bighorn sheep utilize high elevations in the summer months and migrate down the eastern slope of the Sierra Nevada during winter months. These species are not likely to be present on the project site or vicinity when the project is implemented during summer and fall months. The proposed project would not result in a permanent loss of sagebrush scrubland habitat and therefore would not result in the loss of foraging habitat for these species. The proposed project would have ***no impac*t** on western white-tailed jackrabbit and Sierra Nevada bighorn sheep.

Sierra Nevada red fox are typically found at elevations above 7,000 feet and have been extirpated from much of the Sierra Nevada. One potential occurrence of this subspecies has been reported from several miles upstream along Pine Creek, but the identification cannot be confirmed. The project site includes a narrow band of sagebrush scrub habitat adjacent to North Round Valley

Road, which could provide suitable dispersal and foraging habitat for Sierra Nevada red fox. The proposed project would not result in a permanent loss of sagebrush scrubland habitat and therefore would not result in the loss of dispersal/foraging habitat for this species. Project implementation would not impede the movement of this species, if an individual were present at the time of construction. The proposed project would have ***no impact*** on Sierra Nevada red fox.

Special-status Species – Fish

Owens sucker and Owens speckled dace were determined to have moderate potential to occur in the waters of Pine Creek. The proposed project would result in temporary dewatering of Pine Creek in the construction footprint (approximately 50 to 60 linear feet) to complete in-channel construction activities including the removal of the existing failed bridge structure and the construction of two new bridge abutments. Channel dewatering would result in a temporary loss of foraging habitat for fish species. The construction of new bridge abutments would require excavation in the creek bed to construct the cast-in-drilled-hole piles and modification of the channel bank in the immediate vicinity of the abutment. Each new abutment would measure approximately 40 feet long by 12 feet wide by 3 feet deep. Temporary shoring may be required to stabilize the abutment excavation and localized dewatering may be required to ensure that the area surrounding the footing concrete remains dry. Uncured cement has a high pH and can rapidly change stream chemistry if the area is not isolated. Degradation of downstream water quality could result in mortality of aquatic species downstream of construction and could result in mortality of individuals of special-status fish downstream, if present. This would be a ***potentially significant*** impact on special-status fisheries. Implementation of **Mitigation Measure BIO-6** and **BIO-7** requires implementation of dewatering and water quality measures, which would reduce the impact to less than significant. Therefore, the proposed project would have a ***less-than-significant*** impact with mitigation incorporated.

Scour counter measures are required because the soils within the project site are highly susceptible to erosion and therefore it is anticipated that rip rap would be placed 30 feet upstream and 40 downstream of abutments. Placement of rip rap would result in the permanent modification of channel slopes in the immediate vicinity of the bridge resulting in the loss of a fraction of a percent of available spawning habitat within Pine Creek, since most scour counter measures would be placed along the streambank. Up to 70 linear feet of spawning habitat represents a minor loss of the overall amount of spawning habitat present in Pine Creek and therefore this impact would be ***less-than-significant***.

Mitigation Measure BIO-6: Avoid and Minimize Effects to Special-status Fish.

Inyo County shall ensure the construction contractor implement the following measures to avoid and minimize adverse impact on special-status fish species.

1. The construction contractor shall prepare a dewatering plan, which shall be reviewed by a qualified fisheries biologist retained by Inyo County.

2. A qualified biologist shall be present during dewatering activities and shall relocate fish downstream to flowing waters outside the project site, if necessary.

3. No refueling, storage, servicing, or maintenance of equipment shall take place on the shore within 100 feet of the Ordinary High-Water Mark (OHWM) of Pine Creek.

4. All machinery used during project construction shall be properly maintained and cleaned to prevent spills and leaks that could contaminate soil or water. Secondary containment for stationary machinery used to dewater, such as pumps or generators, shall be used.

5. All pumps used to conduct dewatering activities shall be screened to prevent fish entrainment.

6. The area surrounding concrete abutment footings shall remain dry until cement is fully cured. Any waters that make contact with wet cement shall be disposed of outside of the active channel of Pine Creek.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

Mitigation Measure BIO-7: Avoid and Minimize Effects to waters of the United States/waters of the State.

Inyo County shall ensure the construction contractor implement the following measures to avoid and minimize direct fill of waters of the United States in Pine Creek. Pine Creek is also a water of the state, regulated under Section 401 of the CWA, and subject to regulation by CDFW under Section 1600 of the California Fish and Game Code.

1. Ground disturbance shall be limited to construction areas, including necessary access routes and staging areas. The total area of the project activity shall be limited to the minimum necessary. When possible, existing access routes and points shall be used. All roads, staging areas, and other facilities shall be placed to avoid and limit disturbance to Pine Creek when feasible.

2. A Storm Water Pollution Prevention Plan (SWPPP) or a Water Pollution Control Plan (for disturbance areas less than an acre) that identifies specific best management practices (BMPs) to avoid and minimize impacts on water quality during construction activities shall be prepared and implemented. BMPs may include:

3. Erosion control measures that minimize soil or sediment from entering waterways and wetlands shall be installed, monitored for effectiveness, and maintained throughout construction activities.

4. Precautions to minimize turbidity/siltation shall be implemented during construction. This may require placing barriers (e.g., silt curtains) to prevent silt and/or other deleterious materials from entering downstream reaches.

5. Petroleum products, chemicals, fresh cement, and construction by-products containing, or water contaminated by, any such materials shall not be allowed to enter flowing waters and shall be collected and transported to an authorized upland disposal area.

6. A written spill prevention and control plan (SPCP) shall be prepared and implemented. The SPCP and all material necessary for its implementation shall be accessible on-site

prior to initiation of project construction and throughout the construction period. The SPCP shall include a plan for the emergency cleanup of any spills of fuel or other material. Employees/construction workers shall be provided the necessary information from the SPCP to prevent or reduce the discharge of pollutants from construction activities to waters and to use the appropriate measures should a spill occur. In the event of a spill, work shall stop immediately and CDFW, Lahontan Regional Water Quality Control Board (RWQCB), and United States Army Corps of Engineers (USACE) shall be notified within 24 hours.

7. Before the commencement of construction activities, high-visibility fencing shall be erected to protect areas of Pine Creek that are located adjacent to construction areas, but can be avoided, from encroachment of personnel and equipment. The fencing shall be inspected before the start of each work day and shall be removed only when the construction within a given area is completed. Limits of waters of the United States shall be incorporated into project bid specifications, along with a requirement for contractors to avoid these areas.

8. A qualified biologist shall monitor the start of in-water construction activities to ensure that avoidance and minimization measures are being properly implemented and no unauthorized activities occur.

9. Project implementation would result in the need to obtain regulatory permits from USACE, RWQCB, and CDFW for direct impacts to Pine Creek. All measures developed through consultation with the respective regulatory agencies shall be implemented.

10. Section 404: Before any ground-disturbing project activities begin in Pine Creek, a qualified biologist shall conduct a formal delineation of waters of the United States for Clean Water Act Section 404 permitting. The findings shall be documented in a detailed report and submitted to USACE for verification as part of the Section 404 wetland delineation process. Authorization for fill of jurisdictional waters of the United States shall be secured from USACE via the Section 404 permitting process before project construction. Any measures determined necessary during the 404 permitting process shall be implemented during project construction.

11. Section 401: Water quality certification pursuant to Section 401 of the Clean Water Act shall be obtained from the Lahontan RWQCB before starting project construction in any areas that may contain waters of the State. Any measures required as part of the issuance of water quality certification shall be implemented.

12. Section 1602: A CDFW lake and streambed alteration agreement shall be obtained under Section 1602 of the California Fish and Game Code for all work below the top of bank of Pine Creek. Any conditions of issuance of the lake and streambed alteration agreement shall be implemented as part of project implementation.

Responsibility: County of Inyo / Construction Contractor

Timing: Before, During and After Construction Activities

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or

by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

See checklist Item "**a**" above.

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?

See checklist Item "**a**" above.

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?

See checklist Item "**a**" above.

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

No local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, apply to the project site. Consequently, ***no impact*** would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?

No impact would occur.

3.7 Cultural Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
V. CULTURAL RESOURCES.					
Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to California Code of Regulations (CCR) Section 15064.5?	☐	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CCR Section 15064.5?	☐	☒	☐	☐	☐
c) Disturb any human remains, including remains interred outside of dedicated cemeteries?	☐	☒	☐	☐	☐

3.7.1 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to in California Code of Regulations Section 15064.5?

A Cultural Resources Inventory Report (GEI, 2019c) was prepared for the County to evaluate site conditions and potential impacts to cultural resources. The report (available for review at the Inyo County Public Works office) is summarized below and has been conducted to comply with Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106) and the California Environmental Quality Act and its implementing guidelines (CEQA) as pertaining to cultural resources.

The cultural resources investigation included a records search conducted at the Eastern Information Center (EIC) of the California Historical Information System located at the University of California, Riverside and a pedestrian survey of the Area of Potential Effects (APE). The records search at the EIC did not identify any previously reported cultural resources within the APE. One previously unidentified, prehistoric archaeological resource was found during the archaeological field survey. Given the temporary designation RV-1 until the EIC can assign a resource number and trinomial to the site, it consists of a moderately sized lithic scatter predominantly containing debitage but also some stone tools including bifaces, flake tools, and projectile points; two artifact concentrations were also noted.

There is insufficient data regarding RV-1 to determine if it is eligible for listing in either the National Register of Historic Places (NRHP) or the California Register of Historic Resources (CRHR). While RV-1 is outside of the project's area of direct impact, a portion of RV-1 is located within the APE. However, project activities would be focused on construction staging and limited to the existing roadway. To ensure no adverse effects to the resource, implementation of resource avoidance measures provided in **Mitigation Measure CR-1** and **CR-2** would reduce

the impact to less than significant. Therefore, the proposed project would have a ***less-than-significant*** impact with mitigation incorporated.

Mitigation Measure CR-1: Install Environmentally Sensitive Area Fencing Around Portions of Resource RV-1

To ensure no adverse effects to the resource, Inyo County will ensure that the construction contractor install Environmentally Sensitive Area fencing around portions of the RV-1 resource near the roadway limits to clearly depict the limits of the resource. The fencing would provide a visual reference, so construction personnel can clearly recognize the resource limits on the ground and ensure no adverse effects to RV-1.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

Mitigation Measure CR-2: Accidental Finding of Human Remains

1. If human remains are found, the California Health and Safety Code requires that excavation be halted in the immediate area and that the Inyo County Coroner be notified to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private of State lands (California Health and Safety Code, Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by telephone within 24 hours of making that determination (California Health and Safety Code, Section 7050.5[c]).

2. Once notified by the Coroner, the NAHC shall identify the person it believes it the Most Likely Descendant (MLD) of the Native American remains. With permission of the legal landowner(s), the MLD may visit the site and make recommendations regarding the treatment and disposition of the human remains and any associated grave goods. This visit should be conducted with 48 hours of the MLD's notification by the NAHC (California Public Resources Code [PRC], Section 5097.98[a]). If a satisfactory agreement for treatment of the remains cannot be reached, any of the parties may request mediation by the NAHC (California PRC, Section 5097.94[k]). Should mediation fail, the landowner or landowner's representative must reinter the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance (California PRC, Section 5097.98[b]).

Responsibility: County of Inyo / Construction Contractor

Timing: During Construction Activities

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5?

See checklist Item "**a**" above.

c) Disturb any human remains, including remains interred outside of dedicated cemeteries?

See checklist Item "**a**" above.

3.8 Energy

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

3.8.1 Discussion

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

Fuel use would be consistent with typical construction and manufacturing practices and would not require excessive or wasteful use of energy. Construction activities would not reduce or interrupt existing fuel or electricity delivery systems due to insufficient supply. The proposed bridge replacement project would not result in a potentially significant environmental impact due to wasteful, inefficient, or the unnecessary consumption of energy resources. Consequently, ***no impact*** would occur.

b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

The proposed bridge replacement project would not conflict with or obstruct a plan for renewable energy or energy efficiency. Consequently, ***no impact*** would occur.

3.9 Geology and Soils

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
VII. GEOLOGY AND SOILS.					
Would the project:					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒	☐
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey 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, as updated),), 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?	☐	☐	☐	☒	☐

3.9.1 Discussion

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 California Geological Survey Special Publication 42.)

Implementation of the proposed project would adhere to construction recommendations in the California Department of Transportation's Design Manual and the current design parameters of the Structural Engineers of California Uniform Building Code. Therefore, the project would not expose people or structures to potential substantial adverse effects involving the rupture of a known earthquake fault, and no impact would occur. Furthermore, the proposed project would be designed to withstand seismic loading. Consequently, ***no impact*** would occur.

ii) Strong seismic ground shaking?

See checklist Item "**ai**" above.

iii) Seismic-related ground failure, including liquefaction?

See checklist Item "**ai**" above.

iv) Landslides?

The project site and surrounding area is flat and has a low potential for landslides. Construction and operation of the proposed project would result in no additional exposure of people to landslides. Therefore, there would be no increased hazard from landslides and ***no impact***.

b) Result in substantial soil erosion or the loss of topsoil?

Construction activities associated with the project would involve grading and excavation activities within the project site. These activities could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the project site. The County plans to complete construction in the dry season, such that any surfaces disturbed during construction would be paved or re-vegetated before the raining season, keeping the potential for erosion low. Furthermore, the County would employ appropriate sediment and erosion control BMPs to minimize the potential for erosion and sedimentation as part of a SWPPP (or as part of a WPCP in accordance with the construction specifications and prepared by a QSP) in accordance with contract specification and with NPDES General Permit for Storm Water Discharges associated with construction activity. Additionally, the implementation of the erosion prevention measures/water quality best management practices provided under **Mitigation Measure BIO-7** (more fully described above under **Section 3.6** "**Biological Resources**"), would serve to further minimize the project's impacts to soil loss and substantial soil erosion. Consequently, this impact is ***less-than-significant***.

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?

See checklist Item "**ai**" above.

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

See checklist Item "**ai**" above.

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?

Portable toilets would be used for construction workers. The proposed project would not require or include the construction of wastewater disposal systems of any kind. Thus, there would be ***no impact*** related to the ability of project site soils to support the use of septic systems.

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

The proposed bridge replacement project would not destroy a unique geologic feature. Consequently, ***no impact*** would occur.

3.10 Greenhouse Gas Emissions

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

3.10.1 Discussion

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

Project construction-related activities would generate a variety of greenhouse gases, such as carbon dioxide (CO2), methane (CH4), and nitrous dioxide (N2O) from the exhaust of equipment and the exhaust of vehicles for employees, visitors, and construction hauling trips. The project would also result in the short-term generation of aerosols from diesel particulate matter exhaust. Aerosols are short-lived greenhouse gases, as they remain in the atmosphere for approximately one week. The project would emit nitrogen oxides (NOx) and reactive organic gases (ROG), which are ozone precursors. Ozone is a greenhouse gas. However, unlike the other greenhouse gases, ozone in the troposphere is relatively short-lived and is being reduced in the troposphere daily. Overall, these emissions are considered temporary or short-term.

As previously described above in **Section 3.5** "**Air Quality**", the proposed project would not increase roadway capacity or service capabilities that would induce unplanned growth or remove an existing obstacle to growth that would contribute additional long-term sources of ROG or NOx. The proposed project would generate temporary and short-term construction-related emissions of ROG or NOX; however, **Mitigation Measure AIR-1** (more fully described above in **Section 3.5** "**Air Quality**") requires implementation of engine emissions control measures which would further minimize the project's greenhouse gas emission impacts. Therefore, the proposed project would have a ***less-than-significant*** impact.

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

The California Air Resources Board (CARB) Scoping Plan provides an outline of actions to reduce California's GHG emissions. The Scoping Plan requires CARB and other state agencies to adopt regulations and other initiatives to reduce Greenhouse Gases (GHGs). At this time, there are no applicable local plans, mandatory GHG regulations, or finalized agency guidelines that would apply to this project. As such, the proposed project does not conflict with any local plans.

Additionally, the proposed project would generate very minimal GHG emissions compared to GHG thresholds that have been developed by SCAQMD to meet compliance with AB32 requirements. Consequently, this impact is ***less-than-significant***, with no mitigation measures required.

3.11 Hazards and Hazardous Materials

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
IX. HAZARDS AND HAZARDOUS MATERIALS.					
Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 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?	☐	☒	☐	☐	☐

3.11.1 Discussion

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

Hazardous materials present during project construction may include gasoline, diesel fuel, hydraulic oils, equipment coolants, and any generated wastes that may include these materials. Fueling of equipment and vehicle would be performed on-site. Construction equipment and vehicles would use a minimal amount of hazardous materials. Gasoline and diesel fuel would be

stored in small quantities at the staging yards during construction. Although very few individuals live and work in the area, a hazard to the public or the environment could occur through the transport and use of gasoline and diesel fuel on the project site. Spill response and control would be addressed in the project-specific SWPPP or WPCP (more fully described above under **Section 3.6** "**Biological Resources**"). Compliance with the spill control and response measures in the SWPPP or WPCP would reduce the risk to the public and environment from transport and use of hazardous materials. The impact to the public or the environment from use, disposal, or transport of hazardous materials during construction would be ***less-than-significant***.

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?

See checklist Item "**a**" above.

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

The Round Valley Joint Elementary School is located near the project site. However, construction related activities would occur during the summer months to minimize impacts to the school. Consequently, ***no impact*** would occur.

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?

The project site is not located on a site included on a list of hazardous materials sites. The project would result in no impacts associated with emissions from hazardous materials sites. Consequently, ***no impact*** would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 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?

The project site is not located within an airport use plan or within 2 miles of a public airport or public use airport. The project would have no impacts associated with airport hazards. Consequently, ***no impact*** would occur.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The existing bridge is currently not in use, with no through vehicle traffic on this portion of North Round Valley Road. Use of the new bridge would allow for safer passage of larger emergency response vehicles and easier evacuation, if needed. The project would have no impact on emergency response. Consequently, ***no impact*** would occur.

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

Heavy equipment used during project construction has the potential to start a fire on surrounding open space areas near the project site. Vegetation removal activities resulting from the project will help to reduce the potential of wildland fires by providing a clearing, reducing fire fuels and removing fire sustaining litter. In addition, during construction, spark arrestors or turbo chargers (which eliminate sparks in exhaust) and fire extinguishers would be required for all heavy equipment pursuant to **Mitigation Measure HAZ-1** that would serve to further minimize wild land fire impacts. Consequently, this impact is ***less-than-significant*** with mitigation incorporated.

Mitigation Measure HAZ-1: Implement BMPs for Wildland Fire Prevention.

Inyo County shall ensure that the construction contractor will clear dried vegetation or other materials that could serve as fuel for combustion from construction or building areas. To the extent feasible, the contractor shall keep these areas clear of combustible materials to maintain a firebreak. Construction contractors shall ensure that any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

3.12 Hydrology and Water Quality

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
X. HYDROLOGY AND WATER QUALITY.					
Would the project:					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☒	☐	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such 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?	☐	☐	☒	☐	☐

3.12.1 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction-related activities resulting from the proposed project would require ground-disturbing work within and adjacent to Pine Creek. Construction and staging areas would be disturbed by vehicles and various work activities (e.g., grading) that would make these areas susceptible to erosion by stormwater runoff. Sediment-laden stormwater runoff could increase turbidity in Pine Creek within the immediate project area, resulting in a temporary adverse effect

on water quality. However, the County plans to complete construction in the dry season, such that any surfaces disturbed during construction would be paved or re-vegetated before the rainy season, keeping the potential for erosion low. Additionally, impacts to runoff water quality could potentially result from leaks or spills of fuel or hydraulic fluid used in construction equipment; outdoor storage of construction materials; or spills of paints, solvents, or other potentially hazardous materials commonly used in construction.

As previously described above in **Sections 3.6** "**Biological Resources**" and **3.9** "**Geology and Soils**", a SWPPP (or WPCP prepared in accordance with the contract specifications and by a QSP), in accordance with contract specifications and with California National Pollution Discharge Elimination System (NPDES) General Permit for Storm Water Discharges (associated with construction activity) would be implemented as part of the project. The SWPPP (or WPCP) would require the implementation of appropriate construction BMPs and would ensure no water quality standards or waste discharge requirements would be violated. In addition, the project is subject to the water quality and erosion prevention provisions outlined under the Clean Water Act Sections 401 and 404 and a CDFW Streambed Alteration Agreement.

Prior to in-channel construction activities, the County will complete the Section 404 Clean Water Act Nationwide Permitting Process, complete RWQCB certification, and obtain a Streambed Alteration Agreement with California Department of Fish and Wildlife. Conditions of Approval outlined in the respective permits would help to alleviate any potential water quality impacts resulting from bridge replacement activities occurring within Pine Creek. Additionally, the implementation of the erosion prevention measures/water quality best management practices provided under **Mitigation Measure BIO-7** (more fully described above under **Section 3.6** "**Biological Resources**"), would serve to further minimize the project's impacts to soil and substantial soil erosion. Consequently, this impact is ***less-than-significant***, with no further mitigation required.

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

The proposed project would not require the use of groundwater or substantially interfere with groundwater recharge. The proposed project is located within an area where groundwater levels vary seasonally and are highly influenced by precipitation, drainage, soil texture, and profile. Replacement of the bridge would not result in new amounts of impervious surfaces that would affect local groundwater levels or the production rates of nearby water wells. Therefore, the project would not substantially deplete groundwater supplies and would not affect groundwater recharge such that a net deficit would occur. Consequently, this impact is ***less-than-significant***, with no mitigation required.

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?

The project site naturally drains into Pine Creek. The proposed bridge and road widening would not add a significant amount of new impervious surfaces and would not substantially alter the existing topography or drainage pattern of the creek channel. While there may be a temporary alteration of flow during installation of the proposed bridge, any water diversion structures utilized would be in place over a short-term period and are not anticipated to significantly alter the existing drainage pattern of the site in a way that would result in substantial erosion or siltation on- or offsite. In addition, standard construction erosion control measures, permit Conditions of Approval, as well as the SWPPP (or WPCP) would be implemented as a part of the project and would ensure that potential construction erosion and siltation would not affect drainages. Consequently, this impact is ***less-than-significant,*** with no mitigation required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

There are no large water bodies in the vicinity of the project site and the surrounding area is in a flat valley area, not subject to mudflow risks. Consequently, ***no impact*** would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

See checklist Item "**b**" above.

3.13 Land Use and Planning

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XI. LAND USE AND PLANNING.					
Would the project:					
a) Physically divide an established community?	☐	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒	☐

3.13.1 Discussion

a) Physically divide an established community?

The proposed project would replace an existing storm damaged bridge and would not result in a physical division or barrier to an established community. Land uses in the immediate project vicinity consist of open space with scattered rural residential uses. The project is designed to improve public safety, connectivity, and circulation for residents in the project vicinity and any short term-construction-related impacts to local vehicle travel would be minimal. Consequently, implementation of the proposed project would not physically divide an established community and improve public safety by replacing the existing storm damaged bridge, resulting in a ***beneficial impact***.

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

The proposed replacement of an existing bridge would occur within the County's existing right-of-way and the proposed project would remain consistent with the existing site land use and surrounding land use designations, requiring no further change or amendment to the General Plan land use designation or zoning assigned by the County. Therefore, the project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. Consequently, ***No impact*** would occur.

3.14 Mineral Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XII. MINERAL RESOURCES.					
Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?	☐	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	☐

3.14.1 Discussion

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

No mineral extraction activities exist on the project site and mineral extraction is not included as a part of the project. Consequently, ***no impact*** would occur.

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?

See checklist Item "**a**" above.

3.15 Noise

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XIII. NOISE.					
Would the project:					
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 in other 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 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	☐

3.15.1 Discussion

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 in other applicable standards of other agencies?

Implementation of the proposed project would result in potential noise impacts from short-term construction activities. Regarding long-term or operational noise impacts, implementation of the proposed project would not result in added travel lanes along the project alignment, nor would it move travel lanes substantially closer to any sensitive receptor in the project vicinity. In addition, implementation of the proposed project would not result in any increase in traffic volumes along the project alignment. As such, the project would not result in any new long-term operational noise sources, nor would it move existing operational noise sources (i.e., traffic) closer to existing sensitive land uses. No long-term or operational noise impacts are associated with the project and this topic is not addressed further.

Construction activities necessary to complete the bridge replacement would generate a considerable amount of noise in the immediate project vicinity. Noise from vehicles, earth-moving operations, and heavy equipment would result in elevated ambient and intermittent noise levels. Noise impacts from construction depend on the noise generated by various pieces of equipment, timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive receptors, and the noise environment in which the proposed project would be constructed. Noise generated during the construction period would vary on a day-to-day basis, depending on the specific activities being

undertaken at any given time. Construction traffic and equipment resulting from the proposed project is not anticipated beyond the limits of the project site. Consequently, construction noise would not exceed County noise standards. No residential land uses are located near the project site and construction-related activities would occur during the summer months to minimize construction noise to the Round Valley Joint Elementary School. Consequently, ***no impact*** would occur.

b) Generation of excessive groundborne vibration or groundborne noise levels?

See checklist Item "**a**" above.

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

The project site is not located within 2 miles of an airport or within an existing or projected airport land use plan. Consequently, ***no impact*** would occur.

3.16 Population and Housing

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

3.16.1 Discussion

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)?

The proposed project would not directly or indirectly induce growth in the area. The new bridge would restore connectivity and safely accommodate existing traffic volumes by replacing the existing storm damaged bridge. The new bridge and roadway would not provide an extension to new destinations beyond the current extent of the existing road. Construction is expected to last up to 20 weeks utilizing a construction crew of 12 workers. Adequate temporary housing (including local hotels or campgrounds) is available for construction workers and implementation of the proposed project would not require new or additional housing. Consequently, ***no impact*** would occur.

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

Replacing the storm damaged bridge with a similar structure does not involve the construction, displacement, or demolition of any existing housing structures. Consequently, ***no impact*** would occur.

3.17 Public Services

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

3.17.1 Discussion

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

Fire protection?

Police protection?

Schools?

Parks?

Other public facilities?

Implementing the proposed project would not create new housing or other structures and, therefore, would not require additional public services (including fire or police protection facilities, schools, or parks). Furthermore, replacement of the existing storm damaged bridge would improve circulation patterns and benefit emergency response within the local area. Consequently, implementation of the proposed project would result in a ***beneficial impact***.

3.18 Recreation

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XVI. RECREATION.					
Would the project:					
a) 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) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒	☐

3.18.1 Discussion

a) 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?

As previously described, the proposed project does not include the development of any new residential uses or include other land development that would directly induce additional population growth affecting existing recreation facilities or opportunities. Employment opportunities from the construction phase of the project would not induce any additional population growth in Inyo County. Therefore, the project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. Consequently, ***no impact*** would occur.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

See checklist Item "**a**" above.

3.19 Transportation

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XVII. TRANSPORTATION.					
Would the project:					
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☐	☒
b) 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?	☐	☐	☐	☐	☒

3.19.1 Discussion

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

The proposed project complies with multiple circulation system improvement plans and initiatives, and replacement of the existing storm damaged bridge would improve circulation patterns and benefit emergency response within the local area. Consequently, implementation of the proposed project would result in a ***beneficial impact***.

b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

See checklist Item "**a**" above.

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

No hazards due to design features would occur through implementation of the proposed project, as the replacement bridge structure and associated roadway approaches would conform to County standards. In addition, replacement of the storm damaged bridge will be designed to increase safety. Therefore, the project would not substantially increase hazards due to a design feature or incompatible use. Consequently, ***no impact*** would occur.

d) Result in inadequate emergency access?

See checklist Item "**a**" above.

3.20 Tribal Cultural Resources

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XVIII. TRIBAL CULTURAL RESOURCES.					
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐	☐

3.20.1 Discussion

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC 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 listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC Section 5020.1(k)?

Under PRC section 21080.3.1 and 21082.3, the County must consult with tribes traditionally and culturally affiliated with the project area that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

Inyo County sent letters requesting AB 52 consultation to representatives of several federally recognized tribes and California tribes, as shown in **Table 3-1**, below. The letters provided a brief description of the project, the project location, and an invitation to engage in consultation regarding the project. The letters were sent in the first week of March 2019 with return receipts

dated between three and six days after being sent. Responses were due back from the tribes during the second week of April 2019; due dates for the responses were based on the CEQA requirement that tribes be given 30 days to respond from receipt of requests for consultation. As shown in **Table 3-1**, none of the tribal contacts has responded back to the information request.

Table 3-1. Summary Inyo County AB 52 Consultation

Contact	Tribe	Date Sent	Return Receipt	Received By	Response Due	Response
Mary Wuester, Chairperson	Lone Pine Paiute-Shoshone Tribe	3/6/2019	3/12/2019	Jennifer Naylor	4/11/2019	None
Carl Dahlberg, Chairperson	Fort Independence Indian Community of Paiutes	3/6/2019	3/12/2019	Brianne Bent	4/11/2019	None
George Gholson, Chairperson	Timbisha Shoshone Tribe	3/6/2019	3/11/2019	Margaret C.	4/10/2019	None
Danelle Guiterrez, Tribal Historic Preservation Officer	Big Pine Paiute Tribe of the Owens Valley	3/6/2019	3/11/2019	G. Lewis	4/10/2019	None
Genevieve Jones, Chairperson	Big Pine Paiute Tribe of the Owens Valley	3/7/2019	3/11/2019	G. Lewis	4/10/2019	None
Jill Paydon, Tribal Administrator	Big Pine Paiute Tribe of the Owens Valley	3/6/2019	3/11/2019	G. Lewis	4/10/2019	None
Allen Summers Sr, Chairperson	Bishop Paiute Tribe	3/6/2019	3/11/2019	Teresa Martinez	4/10/2019	None
Gloriana Bailey, Tribal Administrator	Bishop Paiute Tribe	3/6/2019	3/11/2019	Teresa Martinez	4/10/2019	None
Monty Bengochia, Tribal Historic Preservation Officer	Bishop Paiute Tribe	3/6/2019	3/11/2019	Teresa Martinez	4/10/2019	None
Michael Mirelez, Cultural Resource Coordinator	Torres Martinez Desert Cahuilla Indians	3/6/2019	3/11/2019	Jones	4/10/2019	None
Darrell Mike, Tribal Chairperson	Twenty-Nine Palms Band of Mission Indians	3/6/2019	3/9/2019	E. Reyes	4/8/2019	None
Anthony Madrigal, Jr., Tribal Grants Administrator	Twenty-Nine Palms Band of Mission Indians	3/6/2019	3/9/2019	E. Reyes	4/8/209	None
Doug Todd Welmas	Cabazon Band of the Mission Indians	3/6/2019	3/9/2019	Frank Quincnez	4/8/2019	None
Jacquelyn Barnum, Environmental Director	Cabazon Band of the Mission Indians	3/6/2019	3/9/2019	Frank Quincnez	4/8/2019	None

While no responses have been received to date, portions of the proposed project area may be sensitive for the presence of tribal cultural resources. However, no tribal cultural resources as defined in Public Resources Code 21074 have been identified in or adjacent to the proposed project area. Consequently, the proposed project is not anticipated to result in an adverse change in the significance of a tribal cultural resource pursuant to Public Resources Code 21074. While unlikely, construction of the proposed project could result in the inadvertent discovery of undocumented tribal cultural resources such as Native American archaeological sites, Native American human remains and associated objects and materials, features, sacred places or objects with value to a Tribe that is culturally or traditionally affiliated with the proposed project, and the disturbance or destruction of these resources. Therefore, the proposed project could result in potentially significant impact on tribal cultural resources. To ensure no adverse effects to the resource, implementation of resource avoidance measures provided in **Mitigation Measure CR-2** and **CR-3** would reduce the impact to less than significant. Therefore, the proposed project would have a ***less-than-significant*** impact with mitigation incorporated.

Mitigation Measure CR-2: Accidental Finding of Human Remains

1. If human remains are found, the California Health and Safety Code requires that excavation be halted in the immediate area and that the Inyo County Coroner be notified to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private of State lands (California Health and Safety Code, Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by telephone within 24 hours of making that determination (California Health and Safety Code, Section 7050.5[c]).

2. Once notified by the Coroner, the NAHC shall identify the person it believes it the Most Likely Descendant (MLD) of the Native American remains. With permission of the legal landowner(s), the MLD may visit the site and make recommendations regarding the treatment and disposition of the human remains and any associated grave goods. This visit should be conducted with 48 hours of the MLD's notification by the NAHC (California Public Resources Code [PRC], Section 5097.98[a]). If a satisfactory agreement for treatment of the remains cannot be reached, any of the parties may request mediation by the NAHC (California PRC, Section 5097.94[k]). Should mediation fail, the landowner or landowner's representative must reinter the remains and associated items with appropriate dignity on the property in a location not subject to further subsurface disturbance (California PRC, Section 5097.98[b]).

Responsibility: County of Inyo / Construction Contractor

Timing: During Construction Activities

Mitigation Measure CR-3: In the Event that Tribal Cultural Resources or Cultural Resources Are Discovered During Construction, Implement Avoidance and Minimization Measures and Procedures to Evaluate Resources.

If cultural resources or tribal cultural resources (such as Native American archaeological materials, sacred objects, unusual amounts of bone or shell, artifacts, or human remains and associated objects and materials) are encountered at the project site during construction, work shall be suspended within 100 feet of the find (based on the apparent distribution of cultural

materials), and the construction contractor shall immediately notify the project's County representative. Avoidance and preservation in place is the preferred manner of mitigating impacts to cultural resources or tribal cultural resources. This will be accomplished, if feasible, by several alternative means, including:

- Recommendations for avoidance of cultural resources or tribal cultural resources will be reviewed by the County representative, interested culturally affiliated Native American tribes and other appropriate agencies, considering factors such as costs, logistics, feasibility, design, technology and social, cultural and environmental considerations, and the extent to which avoidance is consistent with project objectives. Avoidance and design alternatives may include realignment within the project site to avoid cultural resources or tribal cultural resources, modification of the design to eliminate or reduce impacts to tribal cultural resources or modification or realignment to avoid highly significant features within a cultural resource or tribal cultural resource.

- Native American representatives from interested culturally affiliated Native American tribes will be invited to review and comment on these analyses and shall have the opportunity to meet with the County representative and its representatives who have technical expertise to identify and recommend feasible avoidance and design alternatives, so that appropriate and feasible avoidance and design alternatives can be identified.

- If the discovered cultural resource or tribal cultural resource can be avoided, the construction contractor(s), will install protective fencing outside the site boundary, including a 100-foot buffer area, before construction restarts. The boundary of a tribal cultural resource will be determined in consultation with interested culturally affiliated Native American tribes and tribes will be invited to monitor the installation of fencing. Use of temporary and permanent forms of protective fencing will be determined in consultation with Native American representatives from interested culturally affiliated Native American tribes.

- The construction contractor(s) will maintain the protective fencing throughout construction to avoid the site during all remaining phases of construction. The area will be demarcated as an "Environmentally Sensitive Area".

If a cultural resource or tribal cultural resource cannot be avoided, the following performance standard shall be met prior to continuance of construction and associated activities that may result in damage to or destruction of tribal cultural resources:

- Each resource will be evaluated for California Register of Historical Resources- (CRHR) eligibility through application of established eligibility criteria (California Code of Regulations 15064.636), in consultation with consulting Native American Tribes, as applicable.

If a cultural resource or tribal cultural resource is determined to be eligible for listing in the CRHR, the County will avoid damaging effects to the resource in accordance with California PRC Section 21084.3, if feasible. The County shall coordinate the investigation of the find with a qualified archaeologist (meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology) approved by the County and with interested culturally affiliated Native American tribes that respond to the County's invitation. As part of the site investigation and resource assessment, the County and the archaeologist shall consult with interested culturally

affiliated Native American tribes to assess the significance of the find, make recommendations for further evaluation and treatment as necessary and provide proper management recommendations should potential impacts to the resources be determined by the County to be significant. A written report detailing the site assessment, coordination activities, and management recommendations shall be provided to the County representative by the qualified archaeologist. These recommendations will be documented in the project record. For any recommendations made by interested culturally affiliated Native American tribes that are not implemented, a justification for why the recommendation was not followed will be provided in the project record.

Native American representatives from interested culturally affiliated Native American Tribes and the County representative will also consult to develop measures for long-term management of any discovered Native American cultural resources or tribal cultural resources. Consultation will be limited to actions consistent with the jurisdiction of the County and considering ownership of the subject property. To the extent that the County has jurisdiction, routine operation and maintenance within tribal cultural resources retaining tribal cultural integrity shall be consistent with the avoidance and minimization standards identified in this mitigation measure.

If the County determines that the project may cause a significant impact to a cultural resource or tribal cultural resource, and measures are not otherwise identified in the consultation process, the following are examples of mitigation capable of avoiding or substantially lessening potential significant impacts to a tribal cultural resource or alternatives that would avoid significant impacts to the resource. These measures may be considered to avoid or minimize significant adverse impacts and constitute the standard by which an impact conclusion of less-than significant may be reached:

- Avoid and preserve resources in place, including, but not limited to, planning construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

- Treat the resource with culturally appropriate dignity considering Tribal cultural values and meaning of the resource, including, but not limited to, the following:

- Protect the cultural character and integrity of the resource.

- Protect the traditional use of the resource.

- Protect the confidentiality of the resource.

- Establish permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.

- Protect the resource.

Responsibility: County of Inyo / Construction Contractor

Timing: Before and During Construction Activities

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a 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 PRC Section 5024.1.

See checklist Item "**a**" above.

3.21 Utilities and Service Systems

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XIX. UTILITIES AND SERVICE SYSTEMS.					
Would the project:					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider that 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?	☐	☐	☐	☒	☐

3.21.1 Discussion

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?

Replacement of the existing storm damaged bridge would not generate any new housing, businesses, or other changes that would increase the demand for utilities or related service systems beyond their current capacity. Therefore, the proposed project would not require or result in the construction of new or upgraded utility systems. Consequently, ***no impact*** would occur.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

See checklist Item "**a**" above.

c) Result in a determination by the wastewater treatment provider that 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?

See checklist Item "**a**" above.

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?

See checklist Item "**a**" above.

e) Comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?

See checklist Item "**a**" above.

3.22 Wildfire

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

3.22.1 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Replacement of the existing storm damaged bridge would improve local circulation patterns by restoring connectivity to North Round Valley Road, resulting in a benefit to emergency response within the local area. No short or long-term impacts are anticipated to local emergency response plans. Consequently, implementation of the proposed project would result in a ***beneficial impact***.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Heavy equipment used during project construction has the potential to start a fire on surrounding open space areas near the project site. However, implementation of **Mitigation Measure HAZ-1** (more fully described above in **Section 3.11** "**Hazards and Hazardous Materials**") would reduce the potential for construction-related wildland fires by providing a clearing, reducing fire fuels and removing fire sustaining litter. In addition, during construction, spark arrestors or turbo chargers (which eliminate sparks in exhaust) and fire extinguishers would be required for all

heavy equipment. Consequently, this impact is ***less-than-significant*** with mitigation incorporated.

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?

See checklist Item "**a**" above.

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?

Replacement of the existing storm damaged bridge does not include any project features that would expose people or structures to significant wildlife, flooding, or landslide risks, as the replacement bridge would be similar in size and occur within the same project footprint. Consequently, ***no impact*** would occur.

3.23 Mandatory Findings of Significance

Environmental Issue	Potentially Significant Impact	Less-than-Significant Impact with Mitigation Incorporated	Less-than-Significant Impact	No Impact	Beneficial Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.					
Would the project:					
a) 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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐	☐
b) 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) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒	☐

3.23.1 Discussion

a) Would 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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

As discussed in the Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards, Hydrology and Water Quality, and Tribal Cultural Resources sections, any potentially significant impacts related to the quality of the environment, plant, fish, or wildlife habitat or populations, special-status species, and important historical or cultural resources would be reduced to a less-than-significant level through implementation of avoidance and minimization measures and by incorporating mitigation measures. No known cultural resources would be affected by the proposed project and if unidentified resources are encountered during construction, mitigation measures are in place to ensure that impacts would be ***less than significant***.

b) Would 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.)

There are no past, present, or probably future projects in the vicinity of the proposed project. **No cumulative impact** would occur.

c) Would the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

As discussed throughout this IS, construction and operation of the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly. The proposed project is being implemented for the specific purpose of restoring circulation and public safety. Furthermore, mitigation measures are provided as necessary to reduce the proposed project's potentially significant effects on air quality, biological resources, cultural resources, geology and soils, hazards, hydrology and water quality, and tribal cultural resources to less-than-significant levels. Thus, construction and operation of the proposed project would not cause substantial adverse effects on human beings, either directly or indirectly. Replacement of the existing storm damaged bridge would actually improve local circulation patterns by restoring connectivity to North Round Valley Road, resulting in a benefit to emergency response within the local area. There would be **no cumulative impact**.

This page intentionally left blank.

Appendix A. Biological Survey Letter

July 12, 2019

Mr. Michael Errante, Public Works Director
Inyo County Public Works Department
168 N. Edwards Street
P.O. Drawer Q
Independence, CA 93526

Geotechnical
Environmental
Water Resources
Ecological

Subject: Biological Resources Technical Report for the North Round Valley Road Bridge Project

Inyo County is conducting studies to support the North Round Valley Road Bridge Project (proposed project). A state of emergency was declared in Inyo and Mono Counties on October 27, 2017, as a result of severe winter storms and exceptional snowfall, leading to snowmelt that damaged critical infrastructure, including roadways. High-velocity flows in Pine Creek resulted in failure of the North Round Valley Road Bridge over Pine Creek (Bridge No. 48C0044). A field investigation of the project site and assessment of potential for the project to significantly impact sensitive biological resources was conducted by GEI Consultants, Inc. (GEI) on December 13, 2018. This letter report describes the methods and results of the assessment.

Project Location

The project site is located in Inyo County and accessible from North Round Valley Road, via Pine Creek Road or Birchim Lane. The site is west of U.S. Route 395, which provides regional access (**Attachment A, Figures 1 and 2**). Bishop is the nearest incorporated city, located approximately 10 miles to the southeast. The project site encompasses 2.85 acres and is in Section 17 of the U.S. Geological Survey (USGS) 7.5-minute Rovana Quadrangle, Township 6 South, Range 31 East (**Attachment A, Figure 3**).

Pre-field Investigation and Field Survey

Before conducting the field survey, the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2018) and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2018) were reviewed. These reviews were centered on the Rovana USGS 7.5-minute quadrangle and included the eight surrounding quadrangles. Database search results are provided in **Attachment B**.

A list of resources under jurisdiction of the U.S. Fish and Wildlife Service (USFWS) that could occur in the project vicinity was obtained from the USFWS Information for Planning and Conservation (IPaC) website (USFWS 2018a); the IPaC resource list is provided in **Attachment B**. Seven fish and wildlife species listed as "threatened" or "endangered" under the Federal Endangered Species Act (ESA) are included on this list. The project site is not located within proposed or designated critical habitat for any Federally listed species.

Aerial imagery on Google Earth®, National Wetlands Inventory data, and the Natural Resources Conservation Service *Soil Survey of Benton-Owens Valley Area Parts of Inyo and Mono Counties, California* (NRCS 2017) also were reviewed.

www.geiconsultants.com

GEI Consultants, Inc.
2868 Prospect Park Drive, Suite 400, Rancho Cordova, CA 95670
916.631.4500 fax 916.634.4501

A field survey of the project site was conducted by GEI biologists Sarah A. Norris and Brook Constantz on December 13, 2018. Photographs taken during the field survey are provided in **Attachment C**. The field survey included an assessment of habitat types present, including potential waters of the United States, and evaluation of habitat suitability and potential for special-status species to occur at, or adjacent to, the project site and to be affected by implementation of the proposed project.

Environmental Setting

The project site is located within Major Land Resource Area 29 (Southern Nevada Basin and Range) in Land Resource Region D (Western Range and Irrigated Region) (NRCS 2006). Topography on the project site slopes gently toward the east. Elevation at the project site is approximately 4,670 feet above mean sea level (**Attachment A, Figure 3**).

Habitat and Land Cover Types

The project site is composed of sagebrush scrubland, developed areas, and a perennial stream (Pine Creek) (**Attachment A, Figure 4**).

Sagebrush scrub, totaling 2.27 acres, is characterized by an intermittent canopy of short-stature shrubs dominated by big saltbrush (*Artemisia tridentata*), silver sagebrush (*A. cana*), California sagebrush (*A. californica*), and rubber rabbitbrush (*Ericameria nauseosa*). This habitat may be classified to the alliance level, according to the *Manual of California Vegetation* (Sawyer et al., 2009), as big sagebrush shrubland or *Artemisia tridentata* Shrubland Alliance. The shrub layer is typically less than 2 meters tall.

Developed areas, including the paved surface and compacted shoulder of North Round Valley Road, comprise 0.51 acre of the project site. The existing roadway varies from approximately 22 to 24 feet wide. These developed areas completely lack vegetation.

The project site includes a portion of Pine Creek, a perennial stream. Pine Creek is described below under "Sensitive Habitats."

Sensitive Biological Resources

Sensitive biological resources addressed in this assessment include those that are afforded consideration or protection under the California Environmental Quality Act (CEQA), California Fish and Game Code (FGC), California Endangered Species Act (CESA), ESA, Clean Water Act (CWA), and the Porter-Cologne Water Quality Control Act (Porter-Cologne Act).

Special-status Species

For the purposes of this assessment, special-status species include plants and animals that fall into any of the following categories:

- species officially listed by the Federal government or the State of California as endangered, threatened, or rare;
- candidate species for Federal or State listing as endangered or threatened;
- species proposed for Federal or State listing as endangered or threatened;
- taxa (i.e., taxonomic categories or groups) that meet the criteria for listing;

- wildlife species identified by CDFW as species of special concern and plant taxa considered by CDFW to be "rare, threatened, or endangered in California;"
- species listed as Fully Protected under the FGC; or
- species afforded protection under local or regional planning documents.

Plant taxa are assigned by CDFW to one of the following six California Rare Plant Ranks (CRPRs):

- CRPR 1A—Plants presumed to be extinct in California;
- CRPR 1B—Plants that are rare, threatened, or endangered in California and elsewhere;
- CRPR 2A—Plants that are presumed extirpated in California, but are more common elsewhere;
- CRPR 2B—Plants that are rare, threatened, or endangered in California but more common elsewhere;
- CRPR 3—Plants about which more information is needed (a review list); or
- CRPR 4—Plants of limited distribution (a watch list).

All plants with a CRPR are considered "special plants" by CDFW. The term "special plants" is a broad term used by CDFW to refer to all plant taxa inventoried in the CNDDB, regardless of their legal or protection status. As indicated above, only plant taxa considered by CDFW to be "rare, threatened, or endangered in California" (i.e., CRPR 1B and 2B plants) are considered special-status for purposes of this analysis. CDFW applies the term "California species of special concern" to wildlife species that are not listed under CESA but that are nonetheless declining at a rate that could result in listing, or that historically occurred in low numbers and are subject to current known threats to their persistence.

Figure 5 in **Attachment A** show all CNDDB occurrences of plant and wildlife species that meet the definition of special-status species described above and have been documented within 3 miles of the project site. Results of the CNDDB search (see **Attachment B**) yielded occurrences of a total of 55 special-status plants and wildlife within the USGS 9-quad search area; only eight of these species have been documented within 3 miles of the project site. Not all species tracked in the CNDDB and included in the search results in Attachment B meet the definition of a special-status species described above.

Table 1 provides information on special-status plant species that were evaluated for potential to occur on the project site. Species included in the CNDDB or CNPS search results that occupy elevation ranges higher or lower than the elevation of the project site, require alkaline soils not present on the site, or otherwise could be determined to have no potential to occur in the project vicinity, were eliminated from consideration and are not included in **Table 1**.

The following special-status plant species were eliminated from consideration and are not included in Table 1, because their elevation ranges are outside that of the project site: Fish Slough milk-vetch (*Astragalus lentiginosus* var. *piscinensis*), Booth's hairy evening-primrose (*Eremothera boothii* ssp. *intermedia*), hot springs fimbristylis (*Fimbristylis thermalis*), Inyo hulsea (*Hulsea vestita* ssp. *inyoensis*), small-flowered grass-of-Parnassus (*Parnassia parviflora*), and Bailey's greasewood (*Sarcobatus baileyi*).

The soils mapped to the project site are slightly acid or neutral. The following special-status plant species were eliminated from consideration and are not included in Table 1, because they require alkaline soils, which are not present on the project site or immediate vicinity: silver-leaved milk-vetch (*Astragalus argophyllus* var. *argophyllus*), fiddleleaf hawksbeard (*Crepis runcinata*), alkali ivesia (*Ivesia kingii* var. *kingii*), Torrey's blazing star (*Mentzelia torreyi*), Parish's popcornflower (*Plagiobothrys parishii*), Inyo phacelia (*Phacelia inyoensis*), Owens Valley checkerbloom (*Sidalcea covillei*), and foxtail thelypodium (*Thelypodium integrifolium* ssp. *complanatum*). Lincoln rockcress (*Boechera lincolnensis*) and July gold (*Dedeckera eurekensis*) were also eliminated from further consideration because they occur on carbonate soils, typically in the White and Inyo Mountains or Desert Mountains floristic providence, located to the east and south of the project site.

Based on the review of existing documentation and observations made during the field survey, it was determined that there is low potential for two special-status plant species to occur within the sagebrush scrub habitat at the project site: Great Basin onion (*Allium atrorubens* var. *atrorubens*) and many-flowered thelypodium (*Thelypodium milleflorum*).

Table 1. Special-status Plants Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Blooming Period	Status[1]		Habitat Associations	Potential to Occur on the Project Site
		Federal	State		
Great Basin onion *Allium atrorubens* var. *atrorubens*	May–June	–	2B.3	Great Basin scrub, and pinyon and juniper woodland on rocky or sandy soils	Low; suitable habitat is present in the project site. Nearest occurrence is approximately 7 miles south, along Buttermilk Road, west of Highway 168.
Lemmon's milk-vetch *Astragalus lemmonii*	May–August	–	1B.2	Great Basin scrub, meadows and seeps, marshes and swamps, and lake shores	None; no suitable habitat is present on or adjacent to the project site.
Pinyon rockcress *Boechera dispar*	March–June	–	2B.3	Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland on granitic or gravelly soils	None; no suitable habitat is present on or adjacent to the project site.
Scalloped moonwort *Botrychium crenulatum*	June–September	–	2B.2	Bogs and fens, lower montane coniferous forest, meadows and seeps, marshes and swamps, upper montane coniferous forest	None; no suitable habitat is present on or adjacent to the project site.
Inyo County star tulip *Calochortus excavatus*	April–July	–	1B.1	Chenopod scrub, meadows and seeps on alkaline mesic soils	None; no suitable habitat is present on or adjacent to the project site.
Wheeler's dune-broom *Chaetadelpha wheeleri*	April–September	–	1B.2	Desert dunes, Great Basin scrub, Mojavean desert scrub on sandy soils	None; no suitable habitat is present on or adjacent to the project site.

Table 1. Special-status Plants Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Blooming Period	Status[1] Federal	Status[1] State	Habitat Associations	Potential to Occur on the Project Site
Salina Pass wild-rye *Elymus salina*	May–June	–	2B.3	Pinyon and juniper woodland on rocky soils	None; no suitable habitat is present on or adjacent to the project site.
McGee Meadows lupine *Lupinus magnificus* var. *hesperius*	April–June	–	1B.3	Great Basin scrub, upper montane coniferous forest on sandy soils	None; no suitable habitat is present on or adjacent to the project site.
Inyo blazing star *Mentzelia inyoensis*	April–October	–	1B.3	Great Basin scrub, pinyon and juniper woodland on rocky, sometimes carbonate soils	None; no suitable habitat is present on or adjacent to the project site.
Nevada oryctes *Oryctes nevadensis*	April–June	–	2B.1	Chenopod scrub and Mojavean desert scrub on deep sandy soils	None; no suitable habitat is present on or adjacent to the project site.
Frog's-bit buttercup *Ranunculus hydrocharoides*			2B.1	Marshes and swamps	None; no suitable habitat is present on or adjacent to the project site.
Many-flowered thelypodium *Thelypodium milleflorum*	April–June	–	2B.2	Chenopod scrub and Great Basin scrub on sandy soils	Low; suitable habitat is present in the project site. Nearest occurrence is approximately 11 miles northeast, at Fish Slough Petroglyph site, northeast of Bishop, along Five Bridges Road.

[1] Status Definitions

Federal Status
– = No status

California Rare Plant Ranks
1B = Plant species considered rare or endangered in California and elsewhere
2B = Plant species considered rare or endangered in California but more common elsewhere

California Rare Plant Rank Extensions
.1 = Seriously endangered in California (greater than 80 percent of occurrences are threatened and/or have a high degree and immediacy of threat)
.2 = Fairly endangered in California (20 to 80 percent of occurrences are threatened and/or have a moderate degree and immediacy of threat)
.3 = Not very endangered in California

Sources: CDFW 2018; CNPS 2018; USFWS 2018a; data compiled by GEI Consultants, Inc. in 2019

Table 2 provides information on special-status terrestrial wildlife species that were evaluated for potential to occur on the project site. Based on the review of existing documentation and observations made during the field survey, habitat on the project site is unsuitable or only marginally suitable for the special-status wildlife species that were evaluated. Therefore, potential for many of the species to occur on site is low. Some species that are known to occur in the vicinity or that are highly mobile and use a variety of habitat types have moderate potential to occur onsite.

Seven special-status fish were identified in database searches and five were eliminated from consideration. Lahontan cutthroat trout (*Onocorhynchus clarkia henshawi*) are known to occur in the Walker and Carson Rivers and associated drainages, but not known to occur in Pine Creek. Paiute cutthroat trout (*O. clarkia seleniris*) were identified in the CNDDB in Birchim Lake, located in the headwaters of Pine Creek. This occurrence of Paiute cutthroat trout was planted in 1960 and has since hybridized with rainbow or golden trout. Owens pupfish (*Cyprinodon radiosus*) has five known populations from Fish Slough to Lone Pine. Toikona tui chub (*Siphaeteles bicolor snyderi*) was eliminated from consideration because this species is known only to occur at one pond at Mule Spring and White Station Research Station. Owens tui chub (*Siphaeteles bicolor snyderi*) was eliminated from consideration because there are three existing natural Owens tui chub populations, which are located at the Owens River Gorge, source springs of CDFW's Hot Creek Hatchery, and at Cabin Bar Ranch near Owens Dry Lake.

Yosemite toad (*Anaxyrus canorus*) and mountain yellow legged-frog (*Rana muscosa*) were eliminated from consideration and are not included in Table 2, because the project site is outside the elevational range of Yosemite toad and geographic range of mountain yellow-legged frog. California wolverine (*Gulo gulo*) was also eliminated from further consideration since this species is extremely rare in California and known only from the Tahoe National Forest.

Table 2. Special-status Fish and Wildlife Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status		Habitat Associations	Potential to Occur on the Project Site
	Federal	State		
Fish				
Owens sucker *Catostomus fumeiventris*	–	SSC	Primarily found in soft-bottomed runs in cool-water streams, also in lakes or reservoirs. Require gravel for spawning.	Moderate; suitable habitat is present in Pine Creek. Owens suckers are widely distributed in streams and rivers of the Owens River watershed, including the Owens River and Bishop Creek. Nearest occurrence in Horton Creek, located approximately 2 miles south of the project site.
Owens speckled dace *Rhinichthys osculus*	–	SSC	Known to occupy a variety of habitats from cold water streams to hot springs, but rarely in water exceeding 84°F. Stream dwellers spawn in riffles or gravelly areas.	Moderate; suitable habitat is present in Pine Creek. Owens speckled dace are only known to occupy three disjunct areas in the northern Owens Valley: Fish Slough, Round Valley, and areas around and in Bishop. Nearest occurrence in Horton Creek, located approximately 2 miles south of the project site.

Table 2. Special-status Fish and Wildlife Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status		Habitat Associations	Potential to Occur on the Project Site
	Federal	State		
Amphibians				
Northern leopard frog *Lithobates pipiens*	–	SSC	Grassland, wet meadows, potholes, forests, woodland, springs, canals, bogs, marshes, reservoirs; generally prefers permanent water with abundant aquatic vegetation.	None; no suitable habitat is present on or adjacent to the project site.
Sierra Nevada yellow-legged frog *Rana sierrae*	FE	ST	Montane ponds, lakes, and streams, typically with shallow, exposed, and gently-sloping shorelines.	None; no suitable habitat is present on or adjacent to the project site.
Birds				
Northern goshawk *Accipiter gentilis*	–	SSC	Coniferous and montane riparian forest; typically nests on north-facing slopes near water.	Very low; no suitable habitat is present on or adjacent to the project site, and dispersing individuals are very unlikely to occur onsite.
Golden eagle *Aquila chrysaetos*	–	FP	Variety of habitats in foothills, mountains, high plains, and dessert; primarily nests on cliffs in steep canyons, but also in large trees in open areas.	Moderate; no suitable cliffs/canyons are present in the immediate vicinity, and potential nest trees are only marginally suitable, but transient and other non-breeding individuals could occur in the area.
Swainson's hawk *Buteo swainsoni*	–	ST	Nests in woodlands and scattered trees and forages in grasslands and agricultural fields.	Moderate; several potential nest trees are present on and adjacent to the project site, and transient and other non-breeding individuals could occur in the area.
Southwestern willow flycatcher *Empidonax traillii extimus*	FE	SE	Nests in willows and small shrubs near water.	Very low; no suitable nesting habitat is present on or adjacent to the project site, and onsite habitat conditions are poor for migrant individuals.

Table 2. Special-status Fish and Wildlife Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status		Habitat Associations	Potential to Occur on the Project Site
	Federal	State		
Bald eagle *Haliaeetus leucocephalus*	–	SE, FP	Coastal shorelines and wetlands, lakes, reservoirs, and rivers. Nests in large trees, typically in mountain and foothill forests and woodlands and within 1 mile of permanent water that provides suitable foraging habitat (reservoirs, lakes, and rivers).	Moderate; unlikely to nest in the immediate vicinity because of the distance to foraging habitat and poor quality of potential nest trees, but transient and other non-breeding individuals could travel through the area.
Bank swallow *Riparia riparia*	–	ST	Forages in a variety of habitats and nests in vertical banks or bluffs of suitable soil, typically adjacent to water.	Low; no suitable nesting habitat is present on or adjacent to the project site, but transient and other non-breeding individuals could forage over the site. Nearest nest colonies are located at Lake Crowley, North Fork Bishop Creek near the Bishop Airport, and north of the Owens River between 5 Bridges Road and Fish Slough Road north of Bishop.
Mammals				
Pallid bat *Antrozous pallidus*	–	SSC	Variety of habitats, including woodland, forest, grassland, and desert; roosts in tree cavities, rock crevices, mines, caves, and human structures.	Low; no suitable roosting habitat is present on or adjacent to the project site, but individuals from nearby roosts, if present, could forage over the site.
Townsend big-eared bat *Corynorhinus townsendii*	–	SSC	Western populations typically occur in montane habitats with pine, fir, and aspen surrounded by shrub or grasslands; roosts in caves, cliffs, rock ledges, mines, and abandoned structures.	Low; no suitable roosting habitat is present on or adjacent to the project site, but individuals from nearby roosts, if present, could forage over the site.
Spotted bat *Euderma maculatum*	–	SSC	Desert scrub and open forest habitat; roosts along vertical cliffs and in open canyons usually near water.	Low; no suitable roosting habitat is present on or adjacent to the project site, but individuals from nearby roosts, if present, could forage over the site.

Table 2. Special-status Fish and Wildlife Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status		Habitat Associations	Potential to Occur on the Project Site
	Federal	State		
Western white-tailed jackrabbit *Lepus townsendii townsendii*	–	SSC	Coniferous forest, shrublands, and grasslands with open areas, shrub cover, and herbaceous understory; occurs at higher elevations during summer months and descends to the eastern slope of the Sierra Nevada range during winter months.	Moderate; unlikely to be present during summer months but could be present during winter months.
Owens Valley vole *Microtus californicus vallicola*	–	SSC	Shrublands and grasslands near riparian corridors; strongly associated with meadows and other mesic vegetation types.	None; no suitable habitat is present on or adjacent to the project site.
Sierra Nevada bighorn sheep *Ovis canadensis sierrae*	FE	SE, FP	Alpine meadows and rocky summit plateaus. Summer elevation range is typically 10,000 to 14,000 feet, descending to 5,000 feet during winter months.	Moderate; unlikely to be present during summer months but could be present during winter months. Known to occur in winter along the base of Wheeler Ridge, approximately 4 miles west of the project site.
Sierra Nevada red fox *Vulpes vulpes necator*	FC	ST	Variety of montane habitats; prefers forest interspersed with meadows and other open areas and requires dense vegetation and rocky areas for cover and den sites.	Low; project site provides poor habitat and is at the low end of the elevation range for this species; transient individuals could move through the area, but this subspecies has been extirpated from much of its former range, and subspecies identification of a red fox observed nearby (along Pine Creek) was not confirmed.

Table 2. Special-status Fish and Wildlife Evaluated for Potential to Occur on or Adjacent to the Project Site

Species	Status: Federal	Status: State	Habitat Associations	Potential to Occur on the Project Site

Notes: CNDDB = California Natural Diversity Database

[1] **Status Definitions**

Federal Status
FC = Candidate for listing under the Federal Endangered Species Act
FE = Listed as Endangered under the Federal Endangered Species Act
FT = Listed as Threatened under the Federal Endangered Species Act
PT = Proposed for listing as Threatened under the Federal Endangered Species Act
– = No status

State Status
CE = Candidate for Listing as Endangered under the California Endangered Species Act
CT = Candidate for Listing as Threatened under the California Endangered Species Act
FP = Fully Protected under the California Fish and Game Code
SE = Listed as Endangered under the California Endangered Species Act
SSC = California Species of Special Concern
ST = Listed as Threatened under the California Endangered Species Act
– = No status

Sources: CDFW 2018; USFWS 2018a; data compiled by GEI 2019

Sensitive Habitats

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, ESA, Section 1602 of the FGC, Section 404 of the CWA, and the Porter-Cologne Act. Sensitive habitats may be of special concern for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to special-status species.

Critical Habitat

Critical habitat is a geographic area containing features determined to be essential to the conservation of a species listed as threatened or endangered under the ESA. The project site is not located within proposed or designated critical habitat for any listed species (USFWS 2018b).

Other Habitats Protected under Federal and State Regulations

Under Section 404 of the Federal CWA, the U.S. Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into aquatic features that qualify as waters of the United States; wetlands that support hydrophytic vegetation, hydric soil types, and wetland hydrology may also qualify for USACE jurisdiction under Section 404 of the CWA. Under Section 401 of the CWA, the Lahontan Regional Water Quality Control Board (RWQCB) regulates discharge of dredged or fill material into waters of the United States that drain east of the Sierra Nevada, to ensure such activities do not violate State or Federal water quality standards; the Lahontan RWQCB also regulates waters of the State, in compliance with the Porter-Cologne Act. In addition, all diversions, obstruction, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports wildlife resources are subject to the regulatory approval of CDFW pursuant to Section 1602 of the FGC.

Pine Creek flows through the center of the project site (see **Figure 4**). Pine Creek is a named stream on the Rovana USGS topographic map and has perennial flow. This feature is also identified on USFWS National Wetland Inventory, where it is classified as riverine, upper perennial, unconsolidated bottom, permanently flooded (R3UBH). Approximately 0.07 acre of Pine Creek flows through the project site.

Pine Creek headwaters are located high in the Sierra Nevada, east of Royce Peak and southwest of the project site. Pine Creek confluences with Pleasant Valley Reservoir, an impoundment of the Owens River, east of U.S. Route 395. Pine Creek is a jurisdictional water of the United States subject to regulation under Sections 404 and 401 of the CWA and Section 1602 of the FGC.

Natural Communities of Special Concern

CDFW maintains a list of terrestrial natural communities that are native to California, the *List of Vegetation Alliances and Associations* (CDFG 2010). Within that list, CDFW identifies and ranks natural communities of special concern considered to be highly imperiled. Big sagebrush shrubland is not identified as a community of special concern by CDFW.

Potential Project Impacts

Implementing the proposed project would not result in tree removal or permanent conversion of sagebrush habitat. Developed road shoulders and adjacent sagebrush scrubland are areas where equipment and materials may be temporarily staged. Impacts of the proposed project on biological resources could result from vegetation removal and grading during construction. In-water work could result in temporary disturbance to aquatic biological resources. In general, terrestrial impacts are anticipated to be relatively minor, because project implementation would be restricted to the developed surfaces along North Round Valley Road and sagebrush scrub habitat located adjacent to the road.

In-water construction would be restricted to periods of low-flow, most likely beginning in June. In-water construction activities include removing the existing failed bridge and constructing new abutments in the Pine Creek channel. Because Pine Creek is a perennial channel, dewatering is required to complete project construction.

Special-status Species

This impact discussion focuses on resources with reasonable potential to be affected by implementing the proposed project. Therefore, special-status plant and wildlife species that are unlikely to occur on the project site (because of a lack of suitable conditions, known extant range of the species, and/or lack of occurrence records) are not addressed in this discussion.

Birds

Four special-status bird species—golden eagle, bald eagle, Swainson's hawk, and bank swallow––have low or moderate potential to occur on or adjacent to the project site (see **Table 2**). All these species are known or likely to occur in the general region, but potential for most of them to occur onsite is likely limited to foraging and/or roosting. The project site and immediately adjacent areas provide limited potential nesting habitat for large raptors; only two large-diameter Cottonwood trees are present along the north bank of Pine Creek, and few large trees are present along other nearby portions of the creek. Stick nests were not observed in trees on or near the

project site during the December field survey, when trees were devoid of leaves and nests would have been readily observable. In the unlikely event an active Swainson's hawk nest is present on or adjacent to the project site during demolition and construction activities, nesting birds could be disturbed to an extent that results in nest failure. The CNDDB contains few records for the species nesting in Inyo County, indicating that the population is small, and the loss of a single nest would result in a substantial adverse effect on the species. Mitigation Measures BIO-1 has been identified to reduce the impact to less than significant. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

The project site and vicinity lack suitable nesting habitat for bank swallow. Implementation of the proposed project would result in the loss of a very small amount of temporal foraging habitat loss for one season but would not substantially reduce the overall populations or distribution of any special-status bird species.

Mammals

Three special-status bat species—pallid bat, Townsend big-eared bat, and spotted bat have the potential to forage over the project site, but roosting habitat is absent from the project site and immediate vicinity. Foraging activities are unlikely to be disturbed by construction activities. Areas of rock outcrops near the toe slope of Wheeler Mountain may support colonial bat roost sites, but project activities are unlikely to create enough disturbance to disrupt bats that may roost in such areas, located over 3 miles away. The existing failed bridge structure is concrete slab and lacks cracks or openings on the underside of the bridge deck that could serve as bat rooting habitat. The existing six mature trees on the project site are unlikely to provide habitat for roosting colonies due to the limited about of habitat present, but they could be used as temporary roost sites for small numbers of individuals. Potential disturbance of small numbers of roosting bats that may be present onsite would not result in a substantial adverse effect to local or regional populations of either species. Therefore, the proposed project would have a **less-than-significant impact** on special-status bats.

Western white-tailed jackrabbit and Sierra Nevada bighorn sheep utilize high elevations in the summer months and migrate down the eastern slope of the Sierra Nevada during winter months. These species are not likely to be present on the project site or vicinity when the project is implemented during summer and fall months. The proposed project would not result in a permanent loss of sagebrush scrubland habitat and therefore would not result in the loss of foraging habitat for these species. The proposed project would have **no impact** on western white-tailed jackrabbit and Sierra Nevada bighorn sheep.

Sierra Nevada red fox are typically found at elevations above 7,000 feet and have been extirpated from much of the Sierra Nevada. One potential occurrence of this subspecies has been reported from several miles upstream along Pine Creek, but the identification cannot be confirmed. The project site includes a narrow band of sagebrush scrub habitat adjacent to North Round Valley Road, which could provide suitable dispersal and foraging habitat for Sierra Nevada red fox. The proposed project would not result in a permanent loss of sagebrush scrubland habitat and therefore would not result in the loss of dispersal/foraging habitat for this species. Project implementation would not impede the movement of this species, if an individual were present at the time of construction. The proposed project would have **no impact** on Sierra Nevada red fox.

Fish

Owens sucker and Owens speckled dace were determined to have moderate potential to occur in the waters of Pine Creek. The proposed project would result in temporary dewatering of Pine Creek in the construction footprint (approximately 50 to 60 linear feet) to complete in-channel construction activities including the removal of the existing failed bridge structure and the construction of two new bridge abutments. Channel dewatering would result in a temporary loss of foraging habitat for fish species. The construction of new bridge abutments require excavation in the creek bed to construct the cast-in-drilled-hole piles and modification of the channel bank in the immediate vicinity of the abutment. Each new abutment would measure approximately 40 feet long by 12 feet wide by 3 feet deep. Temporary shoring may be required to stabilize the abutment excavation and localized dewatering may be required to ensure that the area surrounding the footing concrete remains dry. Uncured cement has a high pH and can rapidly change stream chemistry if the area is not isolated. Degradation of downstream water quality could result in mortality of aquatic species downstream of construction and could result in mortality of individuals of special-status fish downstream, if present. This would be a significant impact on special-status fisheries. Mitigation Measures BIO-2 and BIO-3 have been identified to reduce the impact to less than significant. Therefore, the proposed project would have a **less-than-significant impact with mitigation incorporated**.

Scour counter measures are required because the soils within the project site are highly susceptible to erosion and therefore it is anticipated that rip rap would be placed 30 feet upstream and 40 downstream of abutments. Placement of rip rap would result in the permanent modification of channel slopes in the immediate vicinity of the bridge resulting in the loss of a fraction of a percent of available spawning habitat within Pine Creek, since most scour counter measures would be placed along the streambank. Up to 70 linear feet of spawning habitat represents a minor loss of the overall amount of spawning habitat present in Pine Creek and therefore this impact would be **less than significant**.

Sensitive Habitats

Pine Creek flows through the project site. Pine Creek is a water of the United States subject to regulation under Sections 404 and 401 of the CWA and Section 1602 of the FGC. Implementing the proposed project would result in direct modification of the stream bed and shoreline by placing a small amount of rip rap along the stream bank up and downstream of the new bridge abutment. Placement of scour counter measures would not result in the loss of stream capacity. Dewatering would be required to construct the replacement bridge and remove the existing failed bridge abutments. Project activities could temporarily degrade water quality in the stream. Mitigation Measure BIO-3 has been identified to reduce this impact to less than significant. Therefore, the impact on state or federally protected waters and other sensitive habitat would have a **less-than-significant impact with mitigation incorporated**.

Other Potential Impacts on Biological Resources

The project site is part of a much larger extent of drainages and sagebrush scrub habitats and does not serve as a primary movement corridor for fish or wildlife. It also is not known or anticipated to serve as a nursery site for any wildlife species. Therefore, implementing the proposed project would not substantially interfere 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. This impact would be **less than significant**.

The project site is not within any special designated management areas for species or other biological resources. The project site is also not within an area covered by an adopted Habitat Conservation Plan or Natural Community Conservation Plan. Therefore, implementing the proposed project would not conflict with any provisions, guidelines, goals, or objectives related to biological resources outlined in such plans and programs. This impact would be **less than significant**.

Project implementation could result in removal of active nests of common bird species, if removal of ground vegetation occurs during the bird nesting season. Loss of active nests of common species would not substantially reduce their abundance or cause any species to drop below self-sustaining levels; this impact would be **less than significant**. However, destruction of active bird nests or construction disturbance resulting in nest failure could be considered a violation of the FGC. Although mitigation is not required to reduce this impact to less than significant, implementing other recommended measures described below is recommended to would minimize potential for loss of active bird nests protected by FGC Section 3503.

Mitigation Measures

The following measures have been identified to reduce potential impacts on biological resources to less than significant.

Mitigation Measure BIO-1: Avoid and Minimize Effects to Nesting Swainson's Hawk.

Inyo County shall implement the following measures to avoid and minimize potential adverse effects on nesting Swainson's hawk during project construction.

- Preconstruction surveys for active Swainson's hawk nests shall be conducted by a qualified biologist in all areas of suitable nesting habitat within 0.25-mile of project disturbance. A minimum of one survey shall be conducted no more than 14 days before project activities commence.

- Appropriate buffers shall be established and maintained around active nest sites to avoid nest failure from project activities. The appropriate size and shape of the buffers shall be determined by a qualified biologist and may vary depending on the nest location, nest stage, and construction activity. The buffers may be adjusted if a qualified biologist determines it would not be likely to adversely affect the nest. Monitoring shall be conducted to confirm that project activities are not resulting in detectable adverse effects on nesting birds or their young. No project activities shall commence within the buffer areas until a qualified biologist determines that the young have fledged or the nest site is otherwise no longer in use.

  Timing: Before and during construction.

  Responsibility: Inyo County/Construction Contractor.

Significance after Mitigation: With implementation of **Mitigation Measure BIO-1**, the potentially significant impact associated with adverse effects to Swainson's hawk would be reduced to a **less-than-significant** level because the proposed project would avoid and minimize nest disturbance and ensure no active nests are lost because of the proposed project.

Mitigation Measure BIO-2: Avoid and Minimize Effects to Special-status Fish.

Inyo County shall implement the following measures to avoid and minimize adverse impact on special-status fish species.

- The construction contractor shall prepare a dewatering plan, which shall be reviewed by a qualified fisheries biologist retained by Inyo County.
- A qualified biologist shall be present during stream dewatering and shall relocate fish downstream to flowing waters outside the project site, if necessary.
- No refueling, storage, servicing, or maintenance of equipment shall take place on the shore within 100 feet of the OHWM of Pine Creek.
- All machinery used during project construction shall be properly maintained and cleaned to prevent spills and leaks that could contaminate soil or water. Secondary containment for stationary machinery used to dewater, such as pumps or generators, shall be used.
- All pumps used to conduct dewatering activities shall be screened to prevent fish entrainment.
- The area surrounding concrete abutment footings shall remain dry until cement is fully cured. Any waters that make contact with wet cement shall be disposed of outside of the active channel of Pine Creek.

Timing: Before and during construction.

Responsibility: Inyo County/Construction Contractor.

Significance after Mitigation: With implementation of **Mitigation Measure BIO-2** and **BIO-3**, the potentially significant impact associated with adverse effects to special-status fish would be reduced to a **less-than-significant** level because the proposed project would avoid direct habitat modification outside of the project site and minimize habitat modification outside of the project area.

Mitigation Measure BIO-3: Avoid and Minimize Effects to waters of the United States/waters of the State.

Inyo County shall implement the following measures to avoid and minimize direct fill of waters of the United States in Pine Creek. Pine Creek is also a water of the state,

regulated under Section 401 of the CWA, and subject to regulation by CDFW under Section 1600 of the California Fish and Game Code.

- Ground disturbance shall be limited to construction areas, including necessary access routes and staging areas. The total area of the project activity shall be limited to the minimum necessary. When possible, existing access routes and points shall be used. All roads, staging areas, and other facilities shall be placed to avoid and limit disturbance to Pine Creek when feasible.

- A Storm Water Pollution Prevention Plan (SWPPP) that identifies specific best management practices (BMPs) to avoid and minimize impacts on water quality during construction activities shall be prepared and implemented. BMPs may include:

  - Erosion control measures that minimize soil or sediment from entering waterways and wetlands shall be installed, monitored for effectiveness, and maintained throughout construction activities.

  - Precautions to minimize turbidity/siltation shall be implemented during construction. This may require placing barriers (e.g., silt curtains) to prevent silt and/or other deleterious materials from entering downstream reaches.

  - Petroleum products, chemicals, fresh cement, and construction by-products containing, or water contaminated by, any such materials shall not be allowed to enter flowing waters and shall be collected and transported to an authorized upland disposal area.

- A written spill prevention and control plan (SPCP) shall be prepared and implemented. The SPCP and all material necessary for its implementation shall be accessible on-site prior to initiation of project construction and throughout the construction period. The SPCP shall include a plan for the emergency cleanup of any spills of fuel or other material. Employees/construction workers shall be provided the necessary information from the SPCP to prevent or reduce the discharge of pollutants from construction activities to waters and to use the appropriate measures should a spill occur. In the event of a spill, work shall stop immediately and CDFW, Lahontan RWQCB, and USACE shall be notified within 24 hours.

- Before the commencement of construction activities, high-visibility fencing shall be erected to protect areas of Pine Creek that are located adjacent to construction areas, but can be avoided, from encroachment of personnel and equipment. The fencing shall be inspected before the start of each work day and shall be removed only when the construction within a given area is completed. Limits of waters of the United States shall be incorporated into project bid specifications, along with a requirement for contractors to avoid these areas.

- A qualified biologist shall monitor the start of in-water construction activities to ensure that avoidance and minimization measures are being properly implemented and no unauthorized activities occur.

- Project implementation would result in the need to obtain regulatory permits from USACE, RWQCB, and CDFW for direct impacts to Pine Creek. All measures developed through consultation with the respective regulatory agencies shall be implemented.

  - **Section 404**: Before any ground-disturbing project activities begin in Pine Creek, a qualified biologist shall conduct a formal delineation of waters of the United States for Clean Water Act Section 404 permitting. The findings shall be documented in a detailed report and submitted to USACE for verification as part of the Section 404 wetland delineation process.

    Authorization for fill of jurisdictional waters of the United States shall be secured from USACE via the Section 404 permitting process before project construction. Any measures determined necessary during the 404 permitting process shall be implemented during project construction.

  - **Section 401**: Water quality certification pursuant to Section 401 of the Clean Water Act shall be obtained from the Lahontan RWQCB before starting project construction in any areas that may contain waters of the State. Any measures required as part of the issuance of water quality certification shall be implemented.

  - **Section 1602**: A CDFW lake and streambed alteration agreement shall be obtained under Section 1602 of the California Fish and Game Code for all work below the top of bank of Pine Creek. Any conditions of issuance of the lake and streambed alteration agreement shall be implemented as part of project implementation.

Timing: Before, during, and after construction.

Responsibility: Inyo County/Construction Contractor.

Significance after Mitigation: With implementation of **Mitigation Measure BIO-3**, the potentially significant impact associated with potential disturbance and loss of sensitive habitats would be reduced to a **less-than-significant** level because direct and indirect impacts to sensitive habitats would be avoided and minimized.

Other Recommended Measures

It is recommended that Inyo County implement the following measures to avoid and minimize destruction of active bird nests and potential violation of FGC Section 3503 during project construction.

- If vegetation removal must occur during the migratory bird nesting season (March 15 through July 31), surveys for active bird nests shall be conducted by a qualified biologist in areas of suitable nesting vegetation designated for removal. If active nests are found, removal of vegetation in which the nests are located will be delayed until a

qualified biologist determines that the young have fledged or the nest site is otherwise no longer in use.

- Preconstruction surveys for active nests of common raptor species shall be conducted by a qualified biologist. Surveys for raptor nests shall include suitable habitat within up to 300 feet of areas subject to project disturbance, depending on the potential extent of indirect impact. Surveys shall be conducted within 14 days before commencement of any construction activities that occur during the raptor nesting season (March 15 to July 31) in a given area.

- If any active nests, or behaviors indicating active nests are present, are observed, appropriate buffers around the nest sites shall be determined by a qualified biologist to avoid nest failure resulting from project activities. Buffer size shall depend on the species, nest location, nest stage, and specific construction activities to be performed while the nest is active. The buffers may be adjusted if a qualified biologist determines it would not be likely to adversely affect the nest. If buffers are adjusted, monitoring shall be conducted to confirm that project activity is not resulting in detectable adverse effects on nesting birds or their young. No project activity shall commence within the buffer areas until a qualified biologist determines that the young have fledged or the nest site is otherwise no longer in use.

Conclusions

Potential significant impacts on biological resources from implementing the proposed project can be reduced to less than significant by implementing appropriate mitigation measures identified in this memorandum report. Construction activities would result in temporary disturbance below the top of bank of Pine Creek and temporary use of developed and sagebrush scrubland as a staging area. With implementation of mitigation measures, the proposed project is not anticipated to have substantial adverse effects on any special-status species. Impacts on waters of the United States and waters of the State from construction of a new bridge can be reduced to less than significant by implementing avoidance and minimization measures, in coordination with the appropriate regulatory agencies. Therefore, implementing the proposed project, including the proposed mitigation measures, would not result in any significant impacts to biological resources.

If you have any questions or concerns regarding this monitoring report, please contact me by phone at 916-912-4941 or e-mail at snorris@geiconsultants.com.

Sincerely,

Sarah A. Norris
Senior Regulatory Specialist, Biologist

Ray Weiss
Project Manager

Attachment A: Figures 1-5
Attachment B: Special-status Species Query Results
Attachment C: Photographs of Project Site

1803488

References

California Department of Fish and Game. 2010. List of Vegetation Alliances and Associations. Available at https://www.wildlife.ca.gov/data/vegcamp/natural-communities#sensitive natural communities. Accessed December 18, 2018.

California Department of Fish and Wildlife. 2018. Results of electronic database search for sensitive species occurrences. Version 5. Biogeographic Data Branch. Available at https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed July 23, 2018.

California Native Plant Society. 2018. *Inventory of Rare and Endangered Plants*. Online edition, v8-03 0.38. Sacramento, CA. Available at http://www.rareplants.cnps.org. September 11, 2018. Accessed December 27, 2018.

Natural Resources Conservation Service. 2017. Web Soil Survey. Last updated August 21, 2017. Available: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm. Accessed December 12, 2018.

NRCS. See Natural Resources Conservation Service.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2nd Edition, California Native Plant Society. Sacramento, CA.

U.S. Fish and Wildlife Service. 2018a. IPaC Resource List. Sacramento Fish and Wildlife Office, Sacramento, CA.

_____. 2018b. Critical Habitat for Threatened and Endangered Species. Available at: https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe0989 3cf75b8dbfb77. Accessed December 12, 2018.

USFWS. See U.S. Fish and Wildlife Service.

USGS. See U.S. Geological Survey.

Attachment A

Figure 1. Regional Location

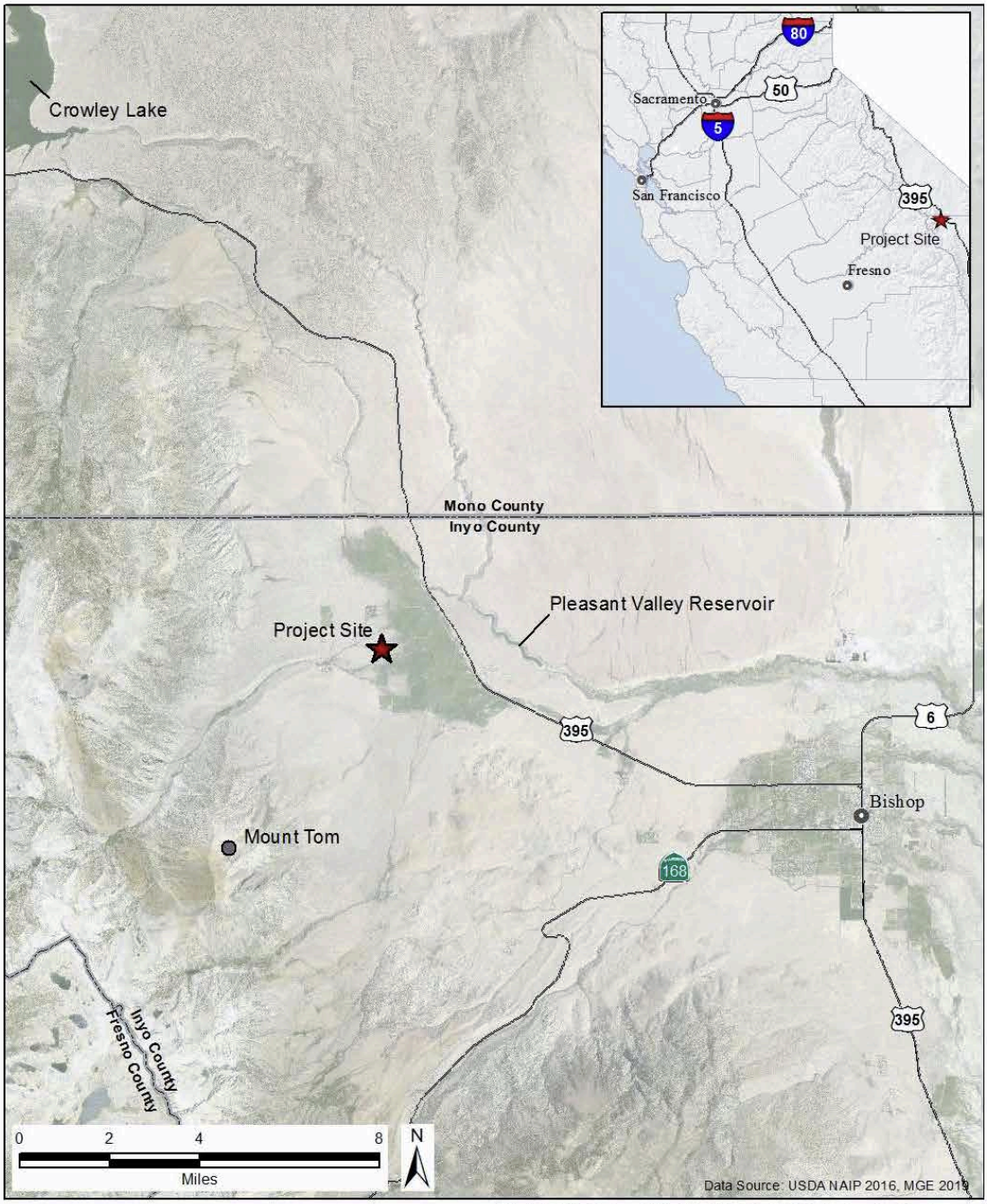
Figure 2. Site and Vicinity

Figure 3. Topographic Map

Figure 4. Land Cover at the Project Site

Figure 5. California Natural Diversity Database Occurrences within 3 Miles of the Project Site

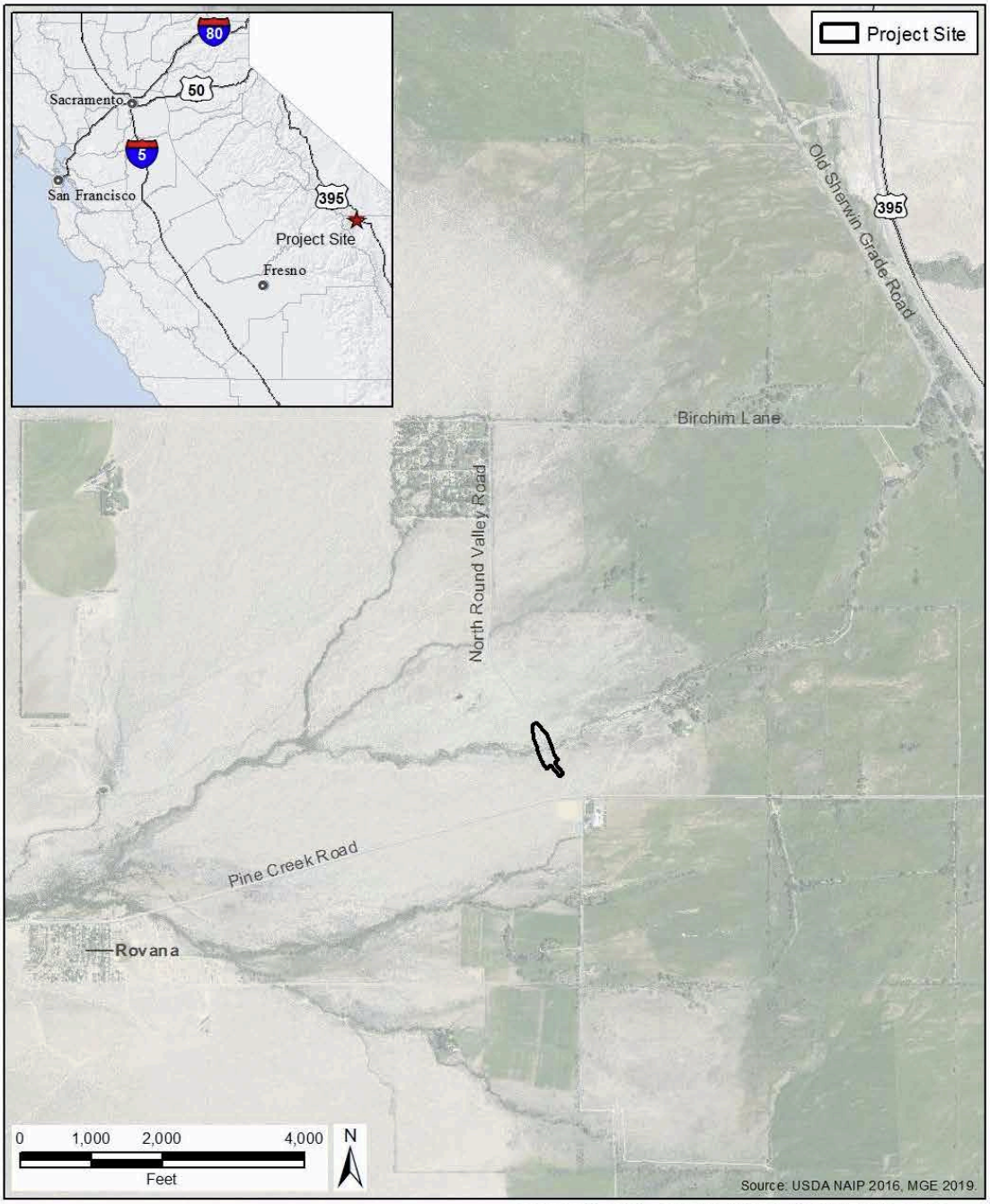
Figure 1. Regional Location



Z:\Projects\1803488_RoundValleyBridge\1803488_G014_RegionalLocation_TechMemo.mxd
26FEB2018 BMC

Source: GEI Consultants, Inc. 2019

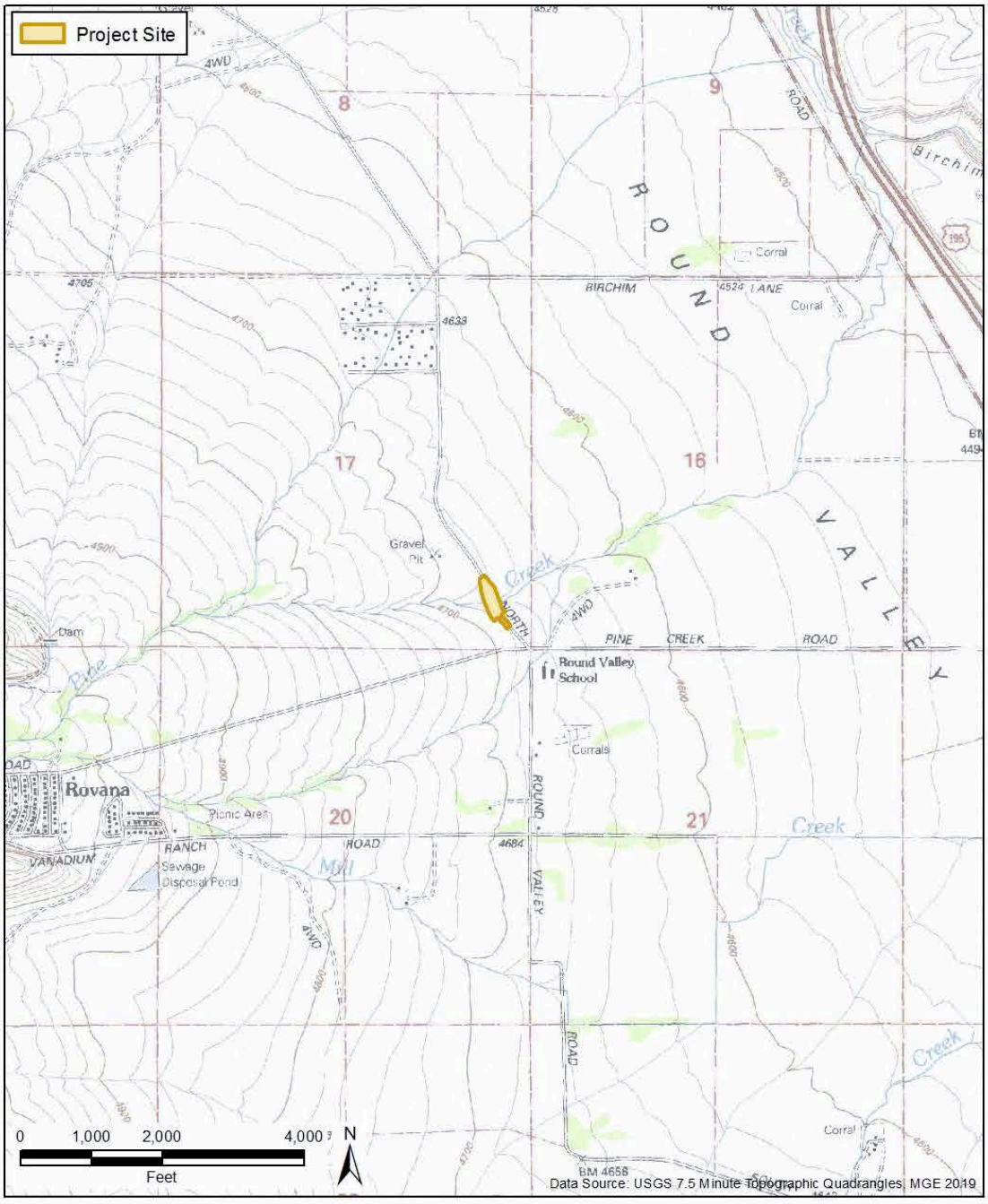
Figure 2. Site and Vicinity



Z:\Projects\1803488_RoundValleyBridge\1803488_G013_SiteAndVicinity_TechMemo.mxd
05JULY2019 BMC

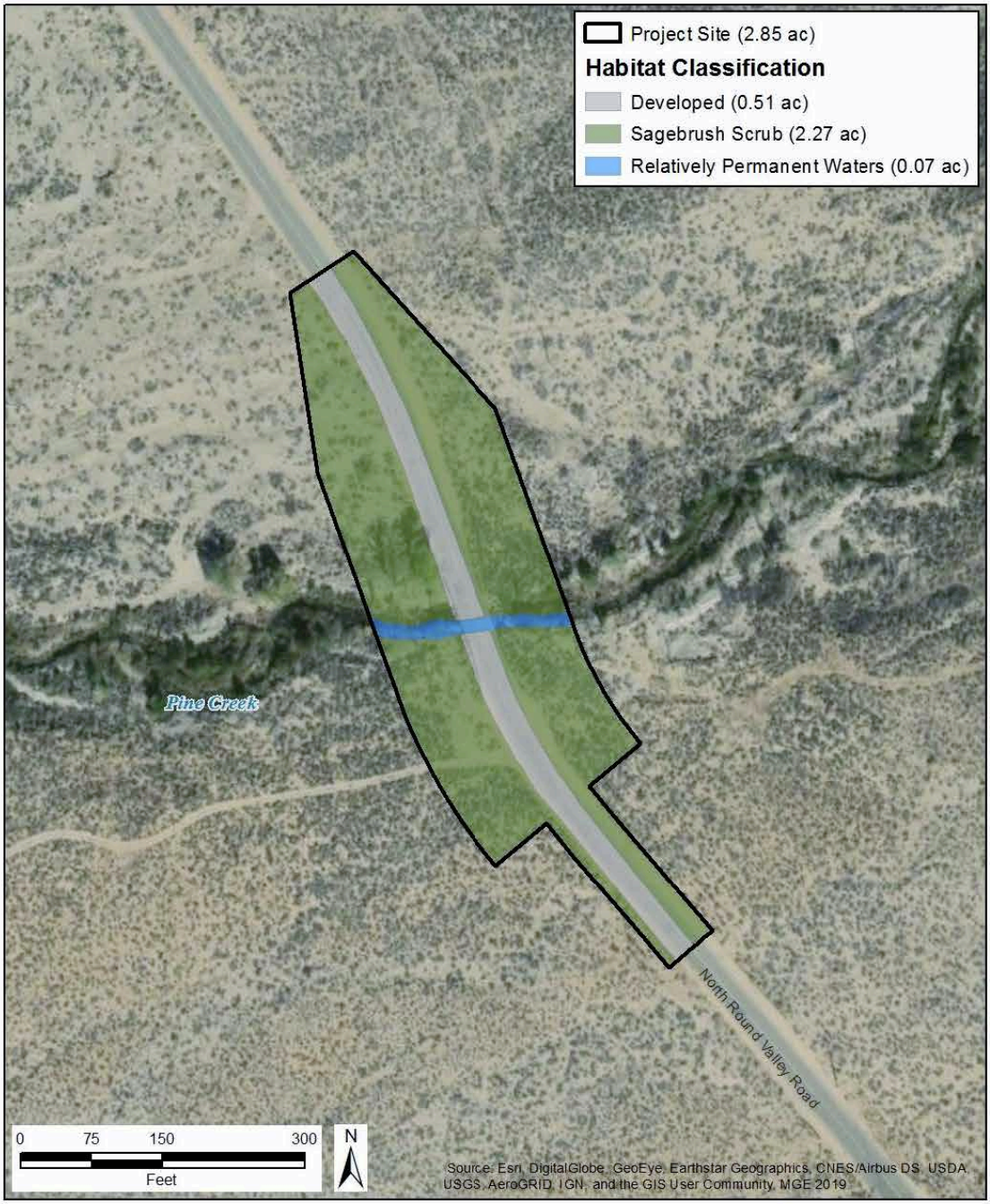
Source: GEI Consultants, Inc. 2019

Figure 3. Topographic Map



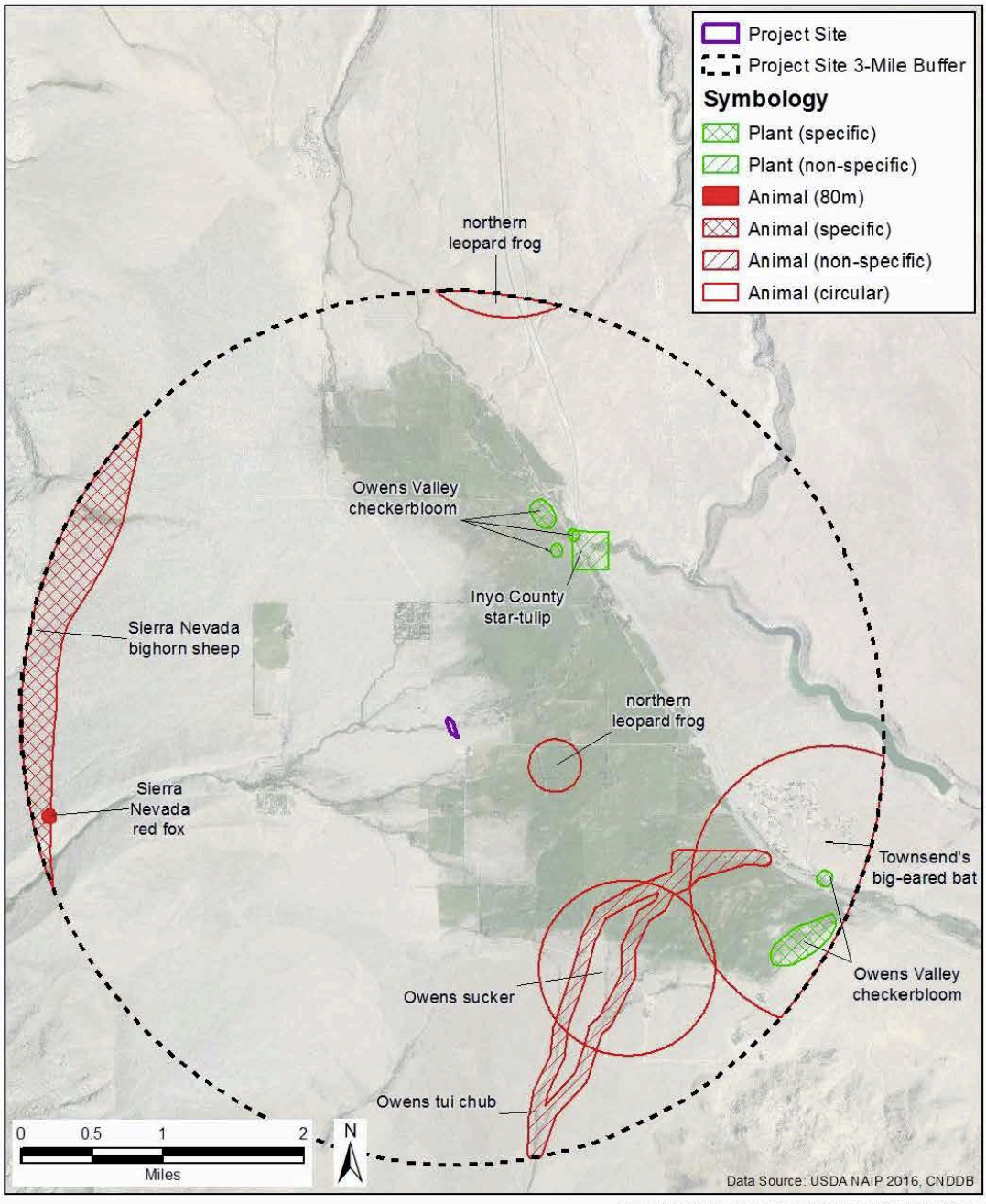
Source: GEI Consultants, Inc. 2019

Figure 4. Land Cover at the Project Site



Source: GEI Consultants, Inc. 2019

Figure 5. California Natural Diversity Database Occurrences within 3 Miles of Project Site



Source: GEI Consultants, Inc. 2019

Attachment B

Special-status Species Query Results

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Rovana (3711845) OR Casa Diablo Mtn. (3711855) OR Chidago Canyon (3711854) OR Mt. Morgan (3711846) OR Fish Slough (3711844) OR Mount Tom (3711836) OR Tungsten Hills (3711835) OR Bishop (3711834) OR Toms Place (3711856))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Accipiter gentilis northern goshawk	ABNKC12060	None	None	G5	S3	SSC
Alkali Meadow Alkali Meadow	CTT45310CA	None	None	G3	S2.1	
Allium atrorubens var. atrorubens Great Basin onion	PMLIL02061	None	None	G4T4	S2	2B.3
Anaxyrus canorus Yosemite toad	AAABB01040	Threatened	None	G2G3	S2S3	SSC
Anodonta californiensis California floater	IMBIV04020	None	None	G3Q	S2?	
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Astragalus argophyllus var. argophyllus silver-leaved milk-vetch	PDFAB0F0S1	None	None	G5T4	S2	2B.2
Astragalus johannis-howellii Long Valley milk-vetch	PDFAB0F4H0	None	Rare	G2	S1	1B.2
Astragalus lemmonii Lemmon's milk-vetch	PDFAB0F4N0	None	None	G2	S2	1B.2
Astragalus lentiginosus var. piscinensis Fish Slough milk-vetch	PDFAB0FB9E	Threatened	None	G5T1	S1	1B.1
Astragalus monoensis Mono milk-vetch	PDFAB0F5N0	None	Rare	G2	S2	1B.2
Astragalus ravenii Raven's milk-vetch	PDFAB0F7F0	None	None	G2	S2	1B.3
Atriplex pusilla smooth saltbush	PDCHE041P0	None	None	G4	SH	2B.1
Boechera dispar pinyon rockcress	PDBRA060F0	None	None	G3	S3	2B.3
Bombus morrisoni Morrison bumble bee	IIHYM24460	None	None	G4G5	S1S2	
Botrychium crenulatum scalloped moonwort	PPOPH010L0	None	None	G4	S3	2B.2
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Calochortus excavatus Inyo County star-tulip	PMLIL0D0F0	None	None	G2	S2	1B.1
Carex scirpoidea ssp. pseudoscirpoidea western single-spiked sedge	PMCYP03C85	None	None	G5T4	S2	2B.2
Catostomus fumeiventris Owens sucker	AFCJC02090	None	None	G3G4	S3	SSC
Chaetadelpha wheeleri Wheeler's dune-broom	PDAST21010	None	None	G4	S2	2B.2
Corynorhinus townsendii Townsend's big-eared bat	AMACC08010	None	None	G3G4	S2	SSC
Crepis runcinata fiddleleaf hawksbeard	PDAST2R0K0	None	None	G5	S3	2B.2
Cyprinodon radiosus Owens pupfish	AFCNB02090	Endangered	Endangered	G1	S1	FP
Draba sierrae Sierra draba	PDBRA112A0	None	None	G3	S3	1B.3
Elymus salina Salina Pass wild-rye	PMPOA6P010	None	None	G4G5	S2S3	2B.3
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Euderma maculatum spotted bat	AMACC07010	None	None	G4	S3	SSC
Falco mexicanus prairie falcon	ABNKD06090	None	None	G5	S4	WL
Fimbristylis thermalis hot springs fimbristylis	PMCYP0B0N0	None	None	G4	S1S2	2B.2
Gulo gulo California wolverine	AMAJF03010	Proposed Threatened	Threatened	G4	S1	FP
Helodium blandowii Blandow's bog moss	NBMUS3C010	None	None	G4	S2	2B.3
Hulsea vestita ssp. inyoensis Inyo hulsea	PDAST4Z073	None	None	G5T2T3	S1S2	2B.2
Hydromantes platycephalus Mount Lyell salamander	AAAAD09020	None	None	G4	S4	WL
Ivesia kingii var. kingii alkali ivesia	PDROS0X092	None	None	G4T3Q	S2	2B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	
Lepus townsendii townsendii western white-tailed jackrabbit	AMAEB03041	None	None	G5T5	S3?	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Lithobates pipiens northern leopard frog	AAABH01170	None	None	G5	S2	SSC
Lupinus magnificus var. hesperius Mcgee Meadows lupine	PDFAB2B2K2	None	None	G3T1Q	S1	1B.3
Lupinus padre-crowleyi Father Crowley's lupine	PDFAB2B2Z0	None	Rare	G2	S2	1B.2
Martes caurina sierrae Sierra marten	AMAJF01014	None	None	G5T3	S3	
Mentzelia inyoensis Inyo blazing star	PDLOA032Z0	None	None	G3	S3	1B.3
Mentzelia torreyi Torrey's blazing star	PDLOA031S0	None	None	G4	S2	2B.2
Microtus californicus vallicola Owens Valley vole	AMAFF11033	None	None	G5T3	S3	SSC
Ochotona princeps schisticeps gray-headed pika	AMAEA0102H	None	None	G5T2T4	S2S4	
Oncorhynchus clarkii seleniris Paiute cutthroat trout	AFCHA02089	Threatened	None	G4T1T2	S1S2	
Oryctes nevadensis Nevada oryctes	PDSOL0Q010	None	None	G3	S2	2B.1
Ovis canadensis sierrae Sierra Nevada bighorn sheep	AMALE04015	Endangered	Endangered	G4T2	S2	FP
Parnassia parviflora small-flowered grass-of-Parnassus	PDSAX0P0A0	None	None	G5?	S2	2B.2
Phacelia inyoensis Inyo phacelia	PDHYD0C2F0	None	None	G3	S3	1B.2
Plagiobothrys parishii Parish's popcornflower	PDBOR0V0U0	None	None	G1	S1	1B.1
Poa lettermanii Letterman's blue grass	PMPOA4Z1H0	None	None	G4	S3	2B.3
Pyrgulopsis perturbata Fish Slough springsnail	IMGASJ0290	None	None	G1	S1	
Pyrgulopsis wongi Wong's springsnail	IMGASJ0360	None	None	G2	S2	
Rana sierrae Sierra Nevada yellow-legged frog	AAABH01340	Endangered	Threatened	G1	S1	WL
Ranunculus hydrocharoides frog's-bit buttercup	PDRAN0L190	None	None	G4	S1	2B.1
Rhinichthys osculus ssp. 2 Owens speckled dace	AFCJB3705F	None	None	G5T1T2Q	S1S2	SSC
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sabulina stricta bog sandwort	PDCAR0G0U0	None	None	G5	S3	2B.3
Sarcobatus baileyi Bailey's greasewood	PDCHE0L020	None	None	G4	S1	2B.3
Sidalcea covillei Owens Valley checkerbloom	PDMAL11040	None	Endangered	G2	S2	1B.1
Siphateles bicolor snyderi Owens tui chub	AFCJB1303J	Endangered	Endangered	G4T1	S1	
Thelypodium integrifolium ssp. complanatum foxtail thelypodium	PDBRA2N062	None	None	G5T4T5	S2	2B.2
Thelypodium milleflorum many-flowered thelypodium	PDBRA2N0A0	None	None	G5	S3?	2B.2
Transmontane Alkali Marsh Transmontane Alkali Marsh	CTT52320CA	None	None	G3	S2.1	
Vulpes vulpes necator Sierra Nevada red fox	AMAJA03012	Candidate	Threatened	G5T1T2	S1	
Water Birch Riparian Scrub Water Birch Riparian Scrub	CTT63510CA	None	None	GNR	SNR	

Record Count: 69

Commercial Version -- Dated July, 1 2018 -- Biogeographic Data Branch

Report Printed on Monday, July 23, 2018

Page 4 of 4

Information Expires 1/1/2019

IPaC resource list

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

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

Location

Inyo County, California

Local office

Reno Fish And Wildlife Office

(775) 861-6300
(775) 861-6301

1340 Financial Boulevard, Suite 234
Reno, NV 89502-7147

http://www.fws.gov/nevada/

Endangered species

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

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

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

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

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

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

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

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

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

Mammals

NAME	STATUS
North American Wolverine Gulo gulo luscus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5123	Proposed Threatened

Amphibians

NAME	STATUS
Mountain Yellow-legged Frog Rana muscosa There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8037	Endangered
Sierra Nevada Yellow-legged Frog Rana sierrae There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/9529	Endangered
Yosemite Toad Anaxyrus canorus There is **final** critical habitat for this species. Your location is outside the critical habitat. 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. https://ecos.fws.gov/ecp/species/3964	Threatened
Owens Pupfish Cyprinodon radiosus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4982	Endangered

Owens Tui Chub Gila bicolor ssp. snyderi — Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/7289

Critical habitats

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

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

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.

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

Additional information can be found using the following links:

- 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

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 (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
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
Golden Eagle Aquila chrysaetos 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/1680	Breeds Dec 1 to Aug 31

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
Lewis's Woodpecker Melanerpes lewis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
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
Pinyon Jay Gymnorhinus cyanocephalus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9420	Breeds Feb 15 to Jul 15
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
Sagebrush Sparrow Artemisiospiza nevadensis This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 15 to Jul 31
Virginia's Warbler Vermivora virginiae This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9441	Breeds May 1 to Jul 31

Willow Flycatcher Empidonax traillii — Breeds May 20 to Aug 31

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/3482

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.

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

Breeding Season (■)

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

Survey Effort (|)

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

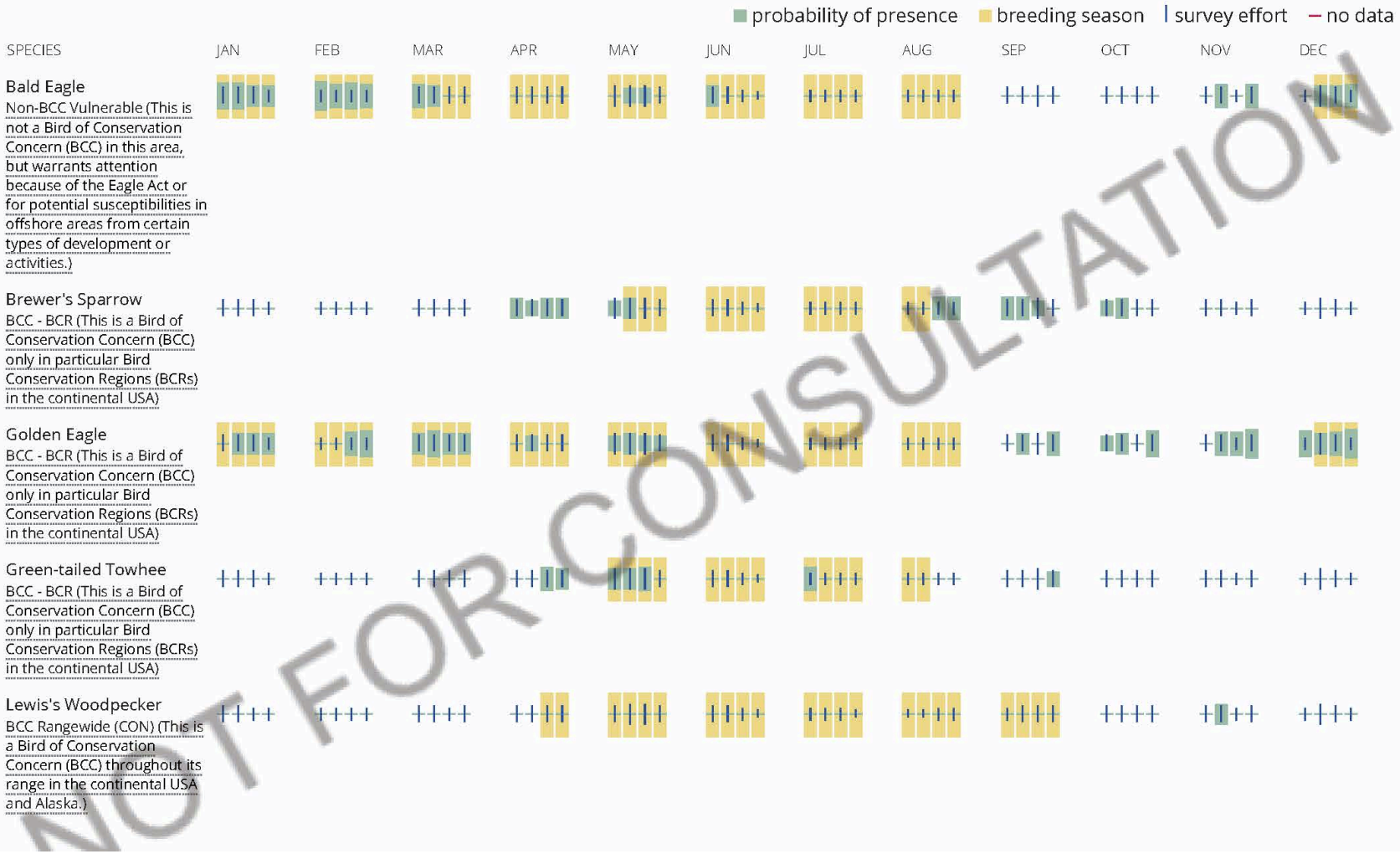
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

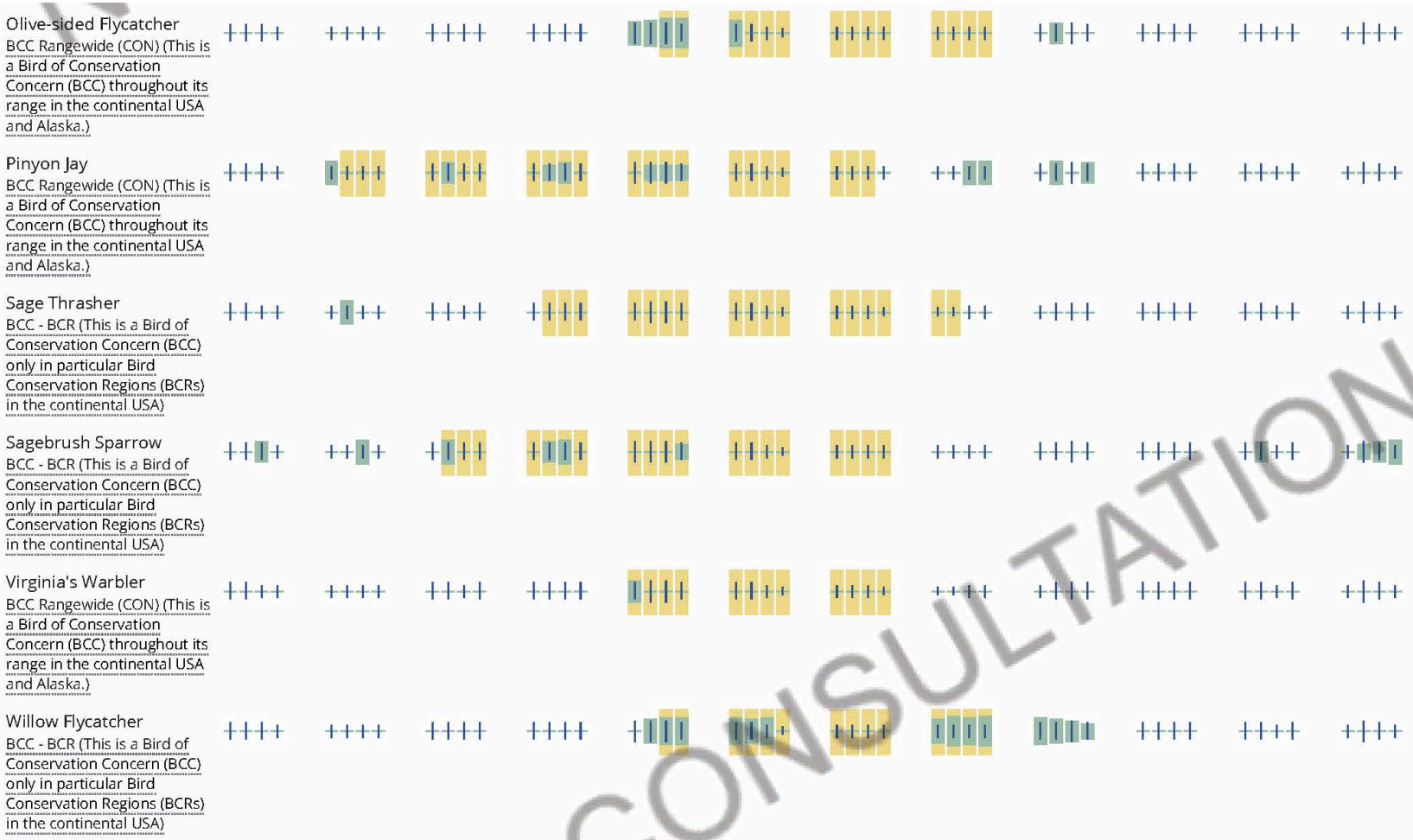
No Data (–)

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

Survey Timeframe

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





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 and/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 E-bird Explore Data 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.

Facilities

National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND

- PEM1C
- PEM1Cx
- PEM1Ax

FRESHWATER FORESTED/SHRUB WETLAND

- PFOC
- PFOA
- PSSCx

FRESHWATER POND

- PUBFx

RIVERINE

- R3UBH
- R3RBH
- R5UBF
- R4SBC
- R4SBA

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

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

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

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

Data exclusions

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

Data precautions

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

CNPS California Native Plant Society — Inventory of Rare and Endangered Plants

Plant List

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

Search Criteria

Found in Quads 3711856, 3711855, 3711854, 3711846, 3711845, 3711844, 3711836 3711835 and 3711834;

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

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Listing Status	Federal Listing Status	Habitats	Lowest Elevation	Highest Elevation
Allium atrorubens var. atrorubens	Great Basin onion	Alliaceae	perennial bulbiferous herb	May-Jun	2B.3			• Great Basin scrub • Pinyon and juniper woodland	1200 m	2315 m
Arabis repanda var. greenei	Greene's rockcress	Brassicaceae	perennial herb	Jun-Aug	3.3			• Subalpine coniferous forest • Upper montane coniferous forest	2345 m	3600 m
Astragalus argophyllus var. argophyllus	silver-leaved milk-vetch	Fabaceae	perennial herb	May-Jul	2B.2			• Meadows and seeps • Playas	1240 m	2350 m
Astragalus inyoensis	Inyo milk-vetch	Fabaceae	perennial herb	May-Jul	4.2			• Great Basin scrub • Pinyon and juniper woodland	1500 m	3050 m
Astragalus johannis-howellii	Long Valley milk-vetch	Fabaceae	perennial herb	Jun-Aug	1B.2	CR		• Great Basin scrub (sandy loam)	2040 m	2530 m
Astragalus kentrophyta var. danaus	Sweetwater Mountains milk-vetch	Fabaceae	perennial herb	Jul-Sep	4.3			• Alpine boulder and rock field • Subalpine coniferous forest (rocky, talus)	3000 m	3660 m
Astragalus lemmonii	Lemmon's milk-vetch	Fabaceae	perennial herb	May-Aug(Sep)	1B.2			• Great Basin scrub • Meadows and seeps • Marshes and swamps (lake shores)	1007 m	2200 m
Astragalus lentiginosus var. piscinensis	Fish Slough milk-vetch	Fabaceae	perennial herb	Jun-Jul	1B.1		FT	• Playas (alkaline)	1130 m	1300 m
Astragalus monoensis	Mono milk-vetch	Fabaceae	perennial herb	Jun-Aug	1B.2	CR		• Great Basin scrub • Upper montane coniferous forest	2110 m	3355 m
Astragalus ravenii	Raven's milk-vetch	Fabaceae	perennial herb	Jul-Sep	1B.3			• Alpine boulder and rock field	3355 m	3460 m

							• Upper montane coniferous forest		
Boechera dispar	pinyon rockcress	Brassicaceae	perennial herb	Mar-Jun	2B.3		• Joshua tree woodland • Mojavean desert scrub • Pinyon and juniper woodland	1200 m	2540 m
Boechera lincolnensis	Lincoln rockcress	Brassicaceae	perennial herb	Mar-May	2B.3		• Chenopod scrub • Mojavean desert scrub	1100 m	2705 m
Botrychium crenulatum	scalloped moonwort	Ophioglossaceae	perennial rhizomatous herb	Jun-Sep	2B.2		• Bogs and fens • Lower montane coniferous forest • Meadows and seeps • Marshes and swamps (freshwater) • Upper montane coniferous forest	1268 m	3280 m
Calochortus excavatus	Inyo County star-tulip	Liliaceae	perennial bulbiferous herb	Apr-Jul	1B.1		• Chenopod scrub • Meadows and seeps	1150 m	2000 m
Carex buxbaumii	Buxbaum's sedge	Cyperaceae	perennial rhizomatous herb	Mar-Aug	4.2		• Bogs and fens • Meadows and seeps (mesic) • Marshes and swamps	3 m	3300 m
Carex incurviformis	Mt. Dana sedge	Cyperaceae	perennial rhizomatous herb	Jul-Aug	4.3		• Alpine boulder and rock field	3700 m	4060 m
Carex scirpoidea ssp. pseudoscirpoidea	western single-spiked sedge	Cyperaceae	perennial rhizomatous herb	Jul,Sep	2B.2		• Alpine boulder and rock field • Meadows and seeps • Subalpine coniferous forest (rocky)	2990 m	3700 m
Chaetadelpha wheeleri	Wheeler's dune-broom	Asteraceae	perennial rhizomatous herb	Apr-Sep	2B.2		• Desert dunes • Great Basin scrub • Mojavean desert scrub	795 m	1900 m
Cleomella brevipes	short-pedicelled cleomella	Cleomaceae	annual herb	May-Oct	4.2		• Meadows and seeps • Marshes and swamps • Playas	395 m	2195 m
Crepis runcinata	fiddleleaf hawksbeard	Asteraceae	perennial herb	May-Aug	2B.2		• Mojavean desert scrub • Pinyon and juniper woodland	1250 m	2195 m
Cryptantha glomeriflora	clustered-flower cryptantha	Boraginaceae	annual herb	Jun-Sep	4.3		• Great Basin scrub • Meadows and seeps • Subalpine coniferous forest • Upper montane coniferous forest	1800 m	3750 m
Dedeckera eurekensis	July gold	Polygonaceae	perennial deciduous shrub	May-Aug	1B.3	CR	• Mojavean desert scrub (carbonate)	1215 m	2200 m
Delphinium inopinum	unexpected	Ranunculaceae	perennial	May-Jul	4.3		• Upper montane coniferous	1890 m	2800 m

	larkspur		herb				forest (rocky, metamorphic)		
Draba sierrae	Sierra draba	Brassicaceae	perennial herb	Jun-Aug	1B.3		• Alpine boulder and rock field (granitic or carbonate)	3500 m	4265 m
Elymus salina	Salina Pass wild-rye	Poaceae	perennial rhizomatous herb	May-Jun	2B.3		• Pinyon and juniper woodland (rocky)	1350 m	2135 m
Eremothera boothii ssp. intermedia	Booth's hairy evening-primrose	Onagraceae	annual herb	(May)Jun	2B.3		• Great Basin scrub (sandy) • Pinyon and juniper woodland	1500 m	2150 m
Eriastrum sparsiflorum	few-flowered eriastrum	Polemoniaceae	annual herb	May-Sep	4.3		• Chaparral • Cismontane woodland • Great Basin scrub • Joshua tree woodland • Mojavean desert scrub • Pinyon and juniper woodland	1075 m	1710 m
Fimbristylis thermalis	hot springs fimbristylis	Cyperaceae	perennial rhizomatous herb	Jul-Sep	2B.2		• Meadows and seeps (alkaline, near hot springs)	110 m	1340 m
Helodium blandowii	Blandow's bog moss	Helodiaceae	moss		2B.3		• Meadows and seeps • Subalpine coniferous forest	1862 m	2700 m
Hulsea vestita ssp. inyoensis	Inyo hulsea	Asteraceae	perennial herb	Apr-Jun	2B.2		• Chenopod scrub • Great Basin scrub • Pinyon and juniper woodland	1645 m	3000 m
Ivesia kingii var. kingii	alkali ivesia	Rosaceae	perennial herb	May-Aug	2B.2		• Great Basin scrub • Meadows and seeps • Playas	1200 m	2130 m
Loeseliastrum depressum	depressed standing-cypress	Polemoniaceae	annual herb		4.3		• Great Basin scrub • Mojavean desert scrub • Pinyon and juniper woodland	1220 m	2100 m
Lupinus magnificus var. hesperius	McGee Meadows lupine	Fabaceae	perennial herb	Apr-Jun	1B.3		• Great Basin scrub • Upper montane coniferous forest	1260 m	1830 m
Lupinus padre-crowleyi	Father Crowley's lupine	Fabaceae	perennial herb	Jul-Aug	1B.2	CR	• Great Basin scrub • Riparian forest • Riparian scrub • Upper montane coniferous forest	2200 m	4000 m
Mentzelia inyoensis	Inyo blazing star	Loasaceae	perennial herb	Apr-Oct	1B.3		• Great Basin scrub • Pinyon and juniper woodland	1158 m	1980 m
Mentzelia torreyi	Torrey's blazing star	Loasaceae	perennial herb	Jun-Aug	2B.2		• Great Basin scrub • Mojavean desert scrub • Pinyon and juniper woodland	1170 m	2835 m
Muilla coronata	crowned muilla	Themidaceae	perennial bulbiferous	Mar-Apr(May)	4.2		• Chenopod scrub • Joshua tree woodland	670 m	1960 m

			herb				• Mojavean desert scrub • Pinyon and juniper woodland		
Oryctes nevadensis	Nevada oryctes	Solanaceae	annual herb	Apr-Jun	2B.1		• Chenopod scrub • Mojavean desert scrub	1100 m	2535 m
Parnassia parviflora	small-flowered grass-of-Parnassus	Parnassiaceae	perennial herb	Aug-Sep	2B.2		• Meadows and seeps	2000 m	2855 m
Penstemon papillatus	Inyo beardtongue	Plantaginaceae	perennial herb	Jun-Jul	4.3		• Pinyon and juniper woodland • Subalpine coniferous forest	2000 m	3000 m
Phacelia inyoensis	Inyo phacelia	Hydrophyllaceae	annual herb	Apr-Aug	1B.2		• Meadows and seeps (alkaline)	915 m	3200 m
Plagiobothrys parishii	Parish's popcornflower	Boraginaceae	annual herb	Mar-Jun(Nov)	1B.1		• Great Basin scrub • Joshua tree woodland	750 m	1400 m
Plagiobryoides vinosula	wine-colored tufa moss	Bryaceae	moss		4.2		• Cismontane woodland • Mojavean desert scrub • Meadows and seeps • Pinyon and juniper woodland • Riparian woodland	30 m	1735 m
Poa lettermanii	Letterman's blue grass	Poaceae	perennial herb	Jul-Aug	2B.3		• Alpine boulder and rock field (sandy or rocky)	3500 m	4265 m
Primula pauciflora	beautiful shootingstar	Primulaceae	perennial herb	Apr-Jun	4.2		• Great Basin scrub • Meadows and seeps • Pinyon and juniper woodland	1000 m	2380 m
Ranunculus hydrocharoides	frog's-bit buttercup	Ranunculaceae	perennial herb (aquatic)	(May)Jun-Sep	2B.1		• Marshes and swamps (freshwater)	1100 m	2700 m
Sarcobatus baileyi	Bailey's greasewood	Sarcobataceae	perennial deciduous shrub	Apr-Jul	2B.3		• Chenopod scrub	1500 m	1600 m
Sidalcea covillei	Owens Valley checkerbloom	Malvaceae	perennial herb	Apr-Jun	1B.1	CE	• Chenopod scrub • Meadows and seeps	1095 m	1415 m
Spartina gracilis	alkali cord grass	Poaceae	perennial rhizomatous herb	Jun-Aug	4.2		• Great Basin scrub • Meadows and seeps • Marshes and swamps	1000 m	2100 m
Thelypodium integrifolium ssp. complanatum	foxtail thelypodium	Brassicaceae	annual / perennial herb	Jun-Oct	2B.2		• Great Basin scrub • Meadows and seeps	1100 m	2500 m
Thelypodium milleflorum	many-flowered thelypodium	Brassicaceae	perennial herb	Apr-Jun	2B.2		• Chenopod scrub • Great Basin scrub (sandy)	1220 m	2500 m
Triglochin palustris	marsh arrow-grass	Juncaginaceae	perennial rhizomatous herb	Jul-Aug	2B.3		• Meadows and seeps • Marshes and swamps (freshwater) • Subalpine coniferous forest	2285 m	3700 m

Suggested Citation

California Native Plant Society, Rare Plant Program. 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 27 December 2018].

Search the Inventory
Simple Search
Advanced Search
Glossary

Information
About the Inventory
About the Rare Plant Program
CNPS Home Page
About CNPS
Join CNPS

Contributors
The Calflora Database
The California Lichen Society
California Natural Diversity Database
The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments
rareplants@cnps.org

Attachment C

Photographs of the Project Site

View of existing failed bridge over Pine Creek. A portion of the existing bridge abutment is located within the OHWM of Pine Creek.

View of existing failed bridge over Pine Creek and abutment to be removed.

C-1

View of Pine Creek upstream of existing bridge.

View of Pine Creek downstream of existing bridge.

C-2