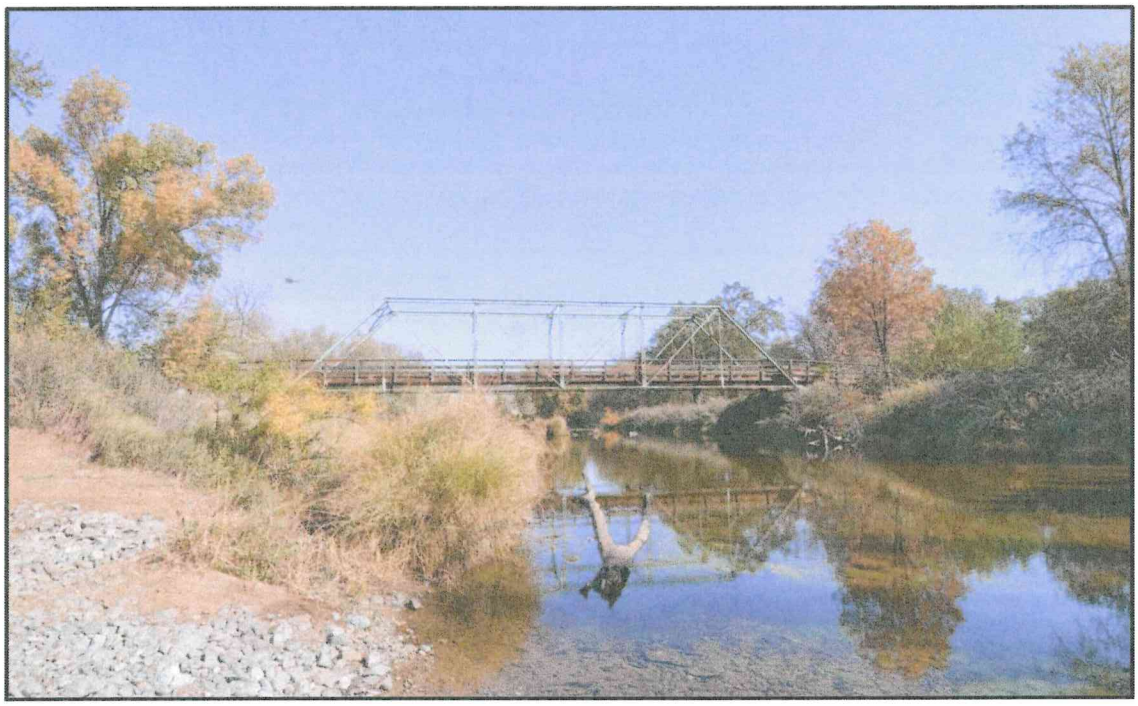
Waldo Road Over Dry Creek Bridge Replacement Project



YUBA COUNTY, CALIFORNIA
CALTRANS DISTRICT 3
FEDERAL PROJECT #BRLO-5916(092)

Partially Recirculated
Draft Environmental Impact Report

State Clearinghouse No. 2022080453

June 2026

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List of Abbreviations

AB 52	Assembly Bill 52
ACHP	Advisory Council on Historic Preservation
ADA	Americans with Disability Act
AMA	Archaeological Monitoring Area
APE	Area of Potential Effects
ASR	Archaeological Survey Report
BAFB	Beale Air Force Base
bgs	Below ground surface
BMPs	Best Management Practices
BSA	Biological Study Area
CAA	Clean Air Act
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBSC	California Building Standards Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
CGP	Construction General Permit
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon Monoxide
Corps	U.S. Army Corps of Engineers
County	Yuba County
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CSO	Cultural Services Office
CWA	Clean Water Act
dBA	A-weighted decibels
DBH	diameter breast height
EDR	Environmental Data Resources, Inc.

EFH	Essential fish habitat
EFHA	Essential Fish Habitat Assessment
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA	Environmentally Sensitive Area
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FIRM	Flood Insurance Rate Map
FRAQMD	Feather River Air Quality Management District
GHG	Greenhouse Gases
HAER	Historic American Engineering Record
HSWA	Hazardous and Solid Waste Amendments
HWCA	Hazardous Waste Control Act
ISA	Initial Site Assessment
MBTA	Migratory Bird Treaty Act
MEC	Munition and Explosive Concern
MOA	Memorandum of Agreement
MRS	Munitions Response Site
MS4	Municipal Separate Storm Sewer System
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NAAQS	National Ambient Air Quality Standards
NCCP/HCP	Natural Community Conservation Plan/Habitat Conservation Plan
NAHC	Native American Heritage Commission
NEHRP	National Earthquake Hazards Reduction Program
NEHRPA	National Earthquake Hazards Reduction Program Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO_2	Nitrogen Dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System

NRHP	National Register of Historic Places
O_3	Ozone
OES	Office of Emergency Services
OSHA	Occupational Safety and Health Administration
Pb	Lead
PM	Particulate Matter
PRC	Public Resources Code
Project	Waldo Road over Dry Creek Bridge Replacement Project
PSI	Preliminary Site Investigation
RCEM	Road Construction Emissions Model
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SIP	State Implementation Plan
SHPO	State Historic Preservation Office
SO_2	Sulfur Dioxide
SRA	State Responsibility Areas
SSC	Species of Special Concern
SWMPs	Storm Water Management Plans
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic air contaminates
TCRs	Tribal Cultural Resources
THPO	Tribal Historic Preservation Officer
TMDL	total maximum daily load
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WDRs	Waste Discharge Requirements
WOTUS	Waters of the U.S.
WPCP	Water Pollution Control Plan

1 INTRODUCTION

1.1 PURPOSE AND LEGAL CONTEXT

In compliance with the California Environmental Quality Act (CEQA), Yuba County (County) is the Lead Agency responsible for preparation of this Partially Recirculated Draft Environmental Impact Report (EIR) for the Waldo Road over Dry Creek Bridge Replacement Project (Project). The Project involves removing the existing bridge and building a new bridge to carry Waldo Road over Dry Creek, approximately 100 feet upstream from the existing bridge (Bridge No. 16C0006). The County has prepared this Partially Recirculated Draft EIR pursuant to requirements under CEQA (Public Resources Code [PRC] section 21000 et seq.) and the CEQA Guidelines (14 California Code of Regulations [CCR] section 15000 et seq.), in particular CEQA Guidelines Section 15088.5, which sets for the requirements for recirculated Draft EIRs. The information contained in this Partially Recirculated Draft EIR will be reviewed and considered by the County and by any responsible or trustee agencies (as defined in CEQA) prior to a decision to approve, disapprove, or modify the proposed Project.

1.2 BACKGROUND AND PROJECT OVERVIEW

The Original Draft EIR was published in March 2025 under State Clearinghouse Number 2022080453. The public review period for the Original Draft EIR lasted 45 days, from March 21, 2025 to May 6, 2025. During the public review period the County received two comment letters. One of the letters was from Beale Air Force Base, a United States Air Force base in Yuba County. The comment letter was from Tamara Gallentine, the Natural and Cultural Resources Manager for Beale Air Force Base (BAFB). Ms. Gallentine stated that the Beale Lake Dam, downstream of the Project, was removed in 2020 and that subsequent snorkel and eDNA surveys identified California Central Valley steelhead and Chinook salmon within Dry Creek upstream of the removed dam. Ms. Gallentine also provided two fish surveys reports through a secure link for the County to review. Ms. Gallentine requested that the County review these reports so that the Biological Resources chapter could be updated to analyze potential Project impacts and determine if additional or revised avoidance, minimization, and/or mitigation measures were needed.

The County reviewed the two fish survey reports and determined that the presence of these fish species was new information and that further environmental analysis of potential environmental impacts was warranted, resulting in a need to prepare a Partially Recirculated Draft EIR, pursuant to State CEQA Guidelines Section 15087 and 15088.5(a). This Partially Recirculated Draft EIR has been prepared to assist the County, responsible agencies, trustee agencies, and the public in understanding the impacts of the new information and of proposed avoidance and minimization measures.

1.3 CHAPTERS INCLUDED IN THIS PARTIALLY RECIRCULATED DRAFT EIR

The CEQA Guidelines state that “[w]hen recirculating a revised EIR, either in whole or in part, the lead agency shall, in the revised EIR or by an attachment to the revised EIR, summarize the revisions made to the previously circulated draft EIR” (see CEQA Guidelines, Section 15088.5[g]). Revisions included in this Partially Recirculated Draft EIR are described as follows.

Chapter 3.3 Biological Resources

The Biological Resources chapter has been revised to include new information relating to the presence of the following: California Central Valley steelhead – DPS (*Oncorhynchus mykiss pop 11* [*O. mykiss pop.11*]), a federal listed threatened species; and protected essential fish habitat (EFH) for Chinook salmon (*Oncorhynchus tshawytscha* [*O. tshawytscha*]). The Biological Resources chapter has also been updated to include a discussion of impacts and newly proposed avoidance and minimization measures to mitigate Project impacts to a less than significant level.

Chapter 3.13 Tribal Cultural Resources

This chapter was updated to include the new information relating to the presence of California Central Valley steelhead –DPS (*O. mykiss pop.11*) and Chinook salmon (*O. tshawytscha*) EFH. These species are important resources to Native Americans and would have historically been within Dry Creek prior to construction of the Beale Lake Dam. The California Central Valley steelhead and the Central Valley Fall/Late-Fall-Ruin Chinook salmon EFH were added as cultural components and character defining features of Tribal Cultural Resource CA-YUB-1924/H. The discussion of impacts was also revised to reference the additional Biological minimization and avoidance measures.

Chapter 3.16 Mandatory Findings of Significance

The Mandatory Findings of Significance chapter has been revised to include the newly proposed avoidance and minimization measures to mitigate Project impacts to California Central Valley steelhead –DPS (*O. mykiss pop.11*) and Chinook salmon (*O. tshawytscha*) EFH.

Chapter 5.5 Mitigation Measures

The Mitigation Measures chapter has been revised to include the newly proposed avoidance and minimization measures to mitigate Project impacts to a less than signification level for California Central Valley steelhead –DPS (*O. mykiss pop.11*) and Chinook salmon (*O. tshawytscha*) EFH and to the identified Tribal Cultural Resource CA-YUB-1924/H.

Chapter 6 Report Preparers

This chapter has not been updated but has been included for reference.

Chapter 7 Distribution List

This chapter has not been updated but has been included for reference.

Chapter 8 References

References added to the chapters in this Partially Recirculated Draft EIR have been included.

EIR Appendices

Appendix F has been added to include the Section 7 of the Endangered Species Act (ESA) National Marine Fisheries consultation and Letter of Concurrence.

Tables

In addition to the identified chapters and appendix, **Table 1 Summary of Affected Resources** and **Table 3 Permits** have been updated and are presented in Chapter 1 of this Partially Recirculated Draft EIR.

1.4 Scope of Recirculation

This Partially Recirculated Draft EIR focuses on the updated environmental analysis of the Project's impacts to the two newly identified biological species. There are no revisions to the Project description or alternatives. Pursuant to procedures set forth in Section 15088.5(f)(2) of the State CEQA Guidelines, reviewers are directed to limit their comments to the revised information contained in this Partially Recirculated Draft EIR. Reviewers need not resubmit comments on the Original Draft EIR. All other portions of the March 2025 Original Draft EIR remain valid and unchanged, including the Project description, alternatives, and significant impacts.

1.5 Organization of the Document

The structure of this document is designed to focus on new and revised content and includes the revised chapters and appendix as detailed above.

1.6 Public Review and Comment

Reviewers of this Partially Recirculated Draft EIR should focus on the sufficiency of the document in identifying and analyzing environmental impacts and distinctions between alternatives. Comments are most helpful when they suggest clarification of a description or analysis and/or specific changes to mitigation measures that would further avoid or minimize environmental effects.

This Partially Recirculated Draft EIR is available for review and comment by the public, responsible agencies, organizations, and other interested parties for a 45-day period (from June 1, 2026 to July 17, 2026). Comments must be received electronically or physically by 5:00pm on the last day of the comment period. Comments about the Partially Recirculated Draft EIR should include the Project Title (Waldo Road Over Dry Creek Bridge Replacement Project) as the subject line and be addressed to:

Yuba County Public Works
Attn.: Samuel L. Bunton, PE
915 8th Street
Marysville, CA 95901
Or publicworks@co.yuba.ca.us

1.7 Next Steps

The Final EIR will be prepared after the close of the public review period. The Final EIR will include comments received during the public review period, responses to those comments, and any revisions made to the document in a track changes format. Yuba County will hold a public hearing during a Board of Supervisors meeting that provides for public comment followed by a vote by the Board of Supervisors to determine approval of the Final EIR.

1.8 Revised Tables

The following tables, **Table 1 Summary of Affected Resources** and **Table 3 Permits** have been updated and are presented below.

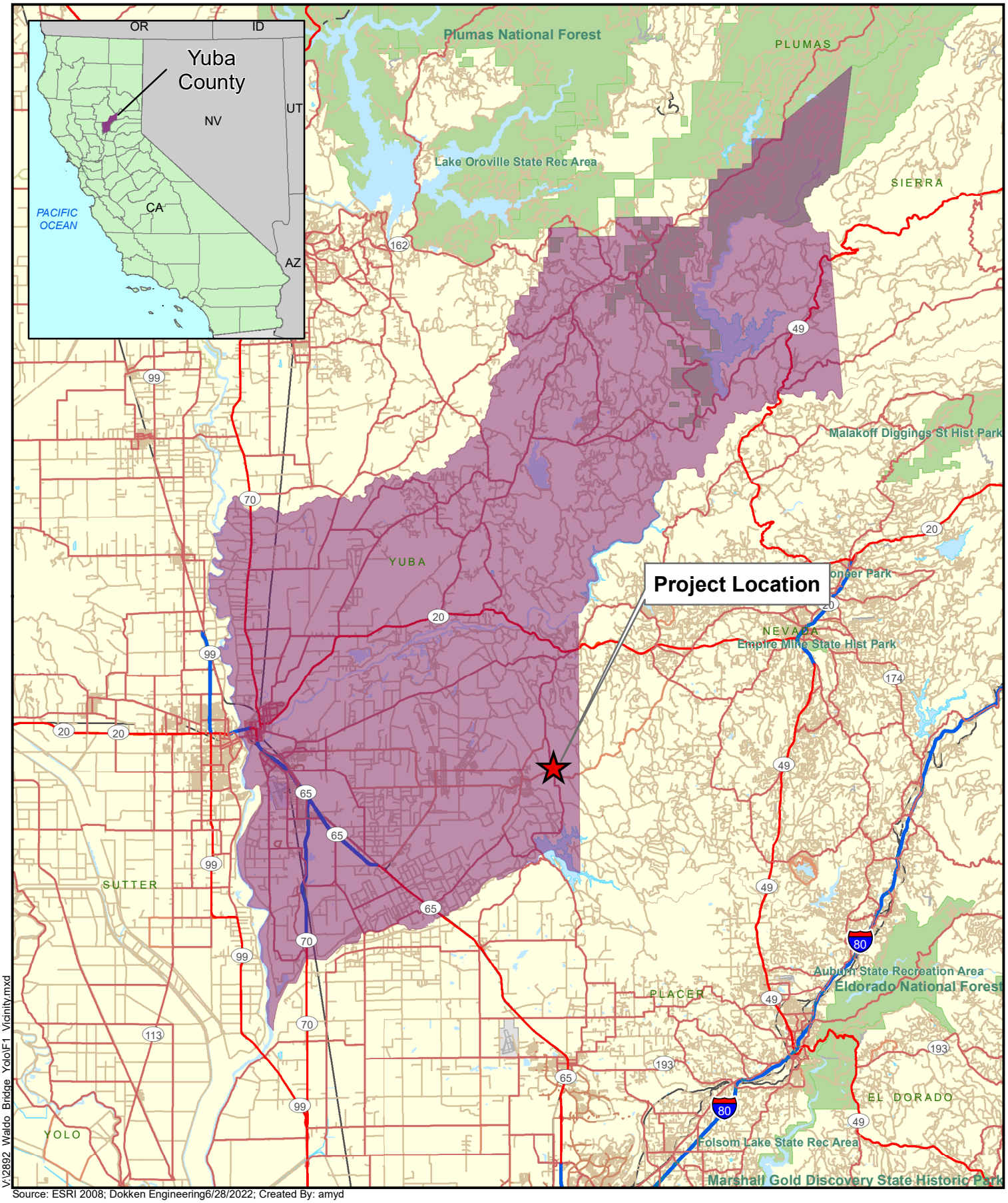
Table 1: Revised Summary of Affected Resources

Resource	Project Impacts		Summary of Avoidance, Minimization, and/or Mitigation Measures	Measures Added as Part of this Partially Recirculated Draft EIR
	Build Alternative	No-Build Alternative		
Aesthetics	Less than Significant Impact with Mitigation	No Impact	BIO-1 and BIO-7	None
Agriculture and Forestry Resources	No Impact	No Impact	No Measures	None
Air Quality	Less than Significant Impact with Mitigation	No Impact	AQ-1 through AQ-4	None
Biological Resources	Less than Significant Impact with Mitigation	No Impact	BIO-1 through BIO-49	BIO-43 through BIO-49
Cultural Resources	Significant Impact	Potentially Significant Impact	CUL-1(a-c) through CUL-2(a-i)	None
Energy	Less than Significant Impact	No Impact	AQ-1	None
Geology and Soils	Less than Significant Impact	No Impact	AQ-1	None
Greenhouse Gas Emissions	Less than Significant Impact	No Impact	No Measures	None
Hazards and Hazardous Materials	Less than Significant Impact with Mitigation	Potentially Significant Impact	HAZ-1 through HAZ-4	None
Hydrology and Water Quality	Less than Significant Impact with Mitigation	No Impact	WQ-1	None
Land Use and Planning	No Impact	No Impact	No Measures	None
Mineral Resources	No Impact	No Impact	No Measures	None
Noise	Less than Significant Impact	No Impact	NOI-1	None

Resource	Project Impacts		Summary of Avoidance, Minimization, and/or Mitigation Measures	Measures Added as Part of this Partially Recirculated Draft EIR
	Build Alternative	No-Build Alternative		
Public Services	Less than Significant Impact	Potentially Significant Impact	No Measures	None
Recreation	No Impact	No Impact	No Measures	None
Transportation/Traffic	Less than Significant Impact	Potentially Significant Impact	No Measures	None
Tribal Cultural Resources	Less than Significant Impact with Mitigation	No Impact	TCR-1 through TCR-4; BIO-1 through BIO-49	BIO-44 through BIO-49
Utilities and Service Systems	Less Than Significant Impact	No Impact	No Measures	None
Wildfire	Less than Significant Impact	Potentially Significant Impact	No Measures	None
Mandatory Findings of Significance	Significant Impact	Potentially Significant Impact	Specific Mitigation Measures	BIO-44 through BIO-49

Table 3: Revised Permits Required

Agency	Permit/Approval		Status
	Build Alternative	No-Build Alternative	
California Department of Fish & Wildlife (CDFW)	Section 1600 Streambed Alteration Agreement	No Permit	To be obtained prior to the start of construction
Central Valley Flood Protection Board	Encroachment Permit	No Permit	To be obtained prior to the start of construction
State Historic Preservation Office	Memorandum of Agreement (MOA)	No MOA	MOA approved/signed by the State Historic Preservation Officer in February 2025
State Regional Water Quality Control Board	Section 401 Water Quality Certification	No Permit	To be obtained prior to the start of construction
State Regional Water Quality Control Board	National Pollution Discharge Elimination System (NPDES) Construction General Permit	No Permit	To be obtained prior to the start of construction
U.S. Army Corps of Engineers	Section 404 Nationwide Permit Authorization	No Permit	To be obtained prior to the start of construction
National Oceanic and Atmospheric Administration: National Marine Fisheries Service	Letter of Concurrence	No Letter of Concurrence	Obtained March 2026



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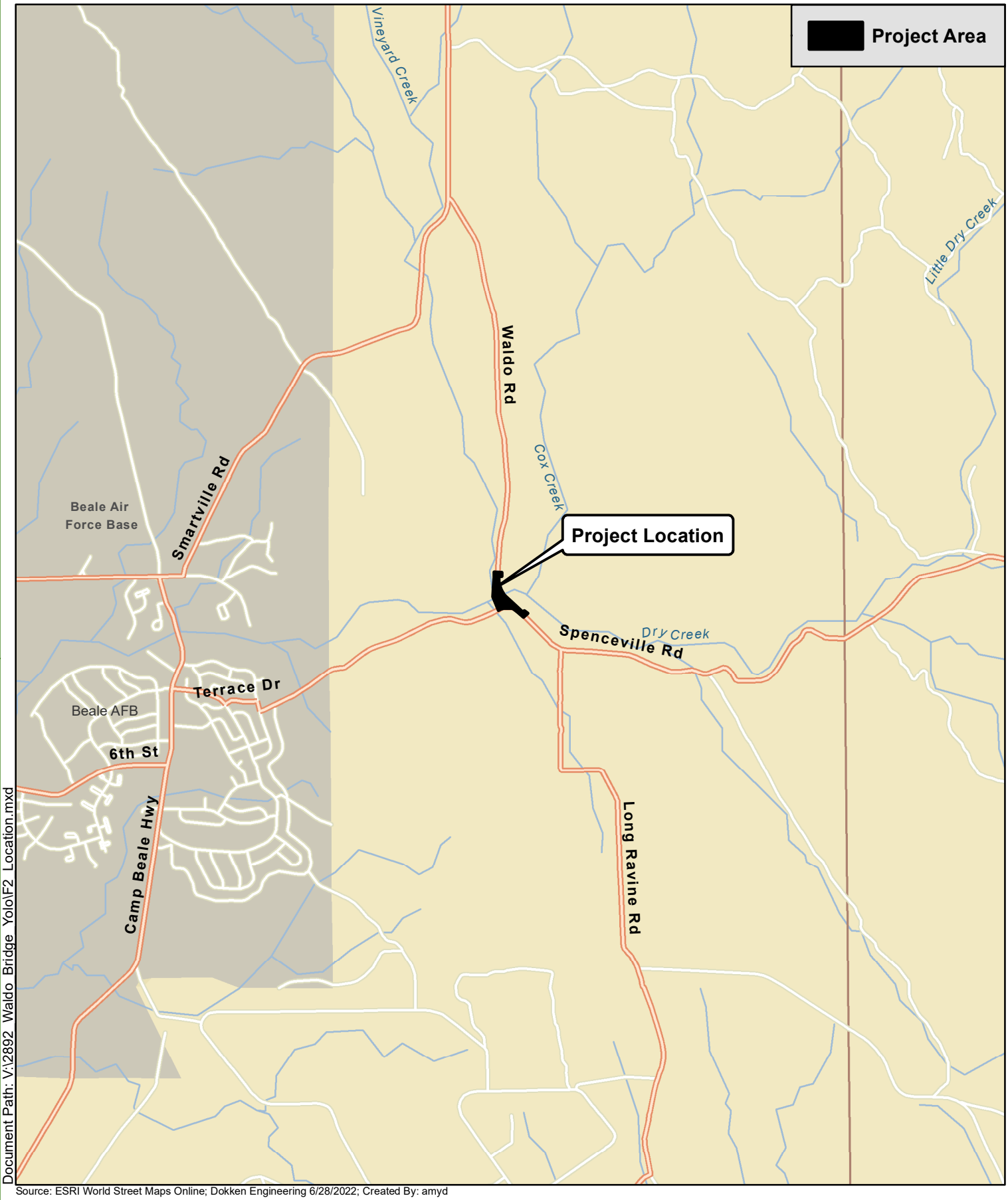
Source: ESRI 2008; Dokken Engineering6/28/2022; Created By: amyd

0 5 10 15 Miles

Figure 1
Project Vicinity
Waldo Road Bridge over Dry Creek Replacement Project
BRLO-5916(092)
Yuba County California



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Source: ESRI World Street Maps Online; Dokken Engineering 6/28/2022; Created By: amyd

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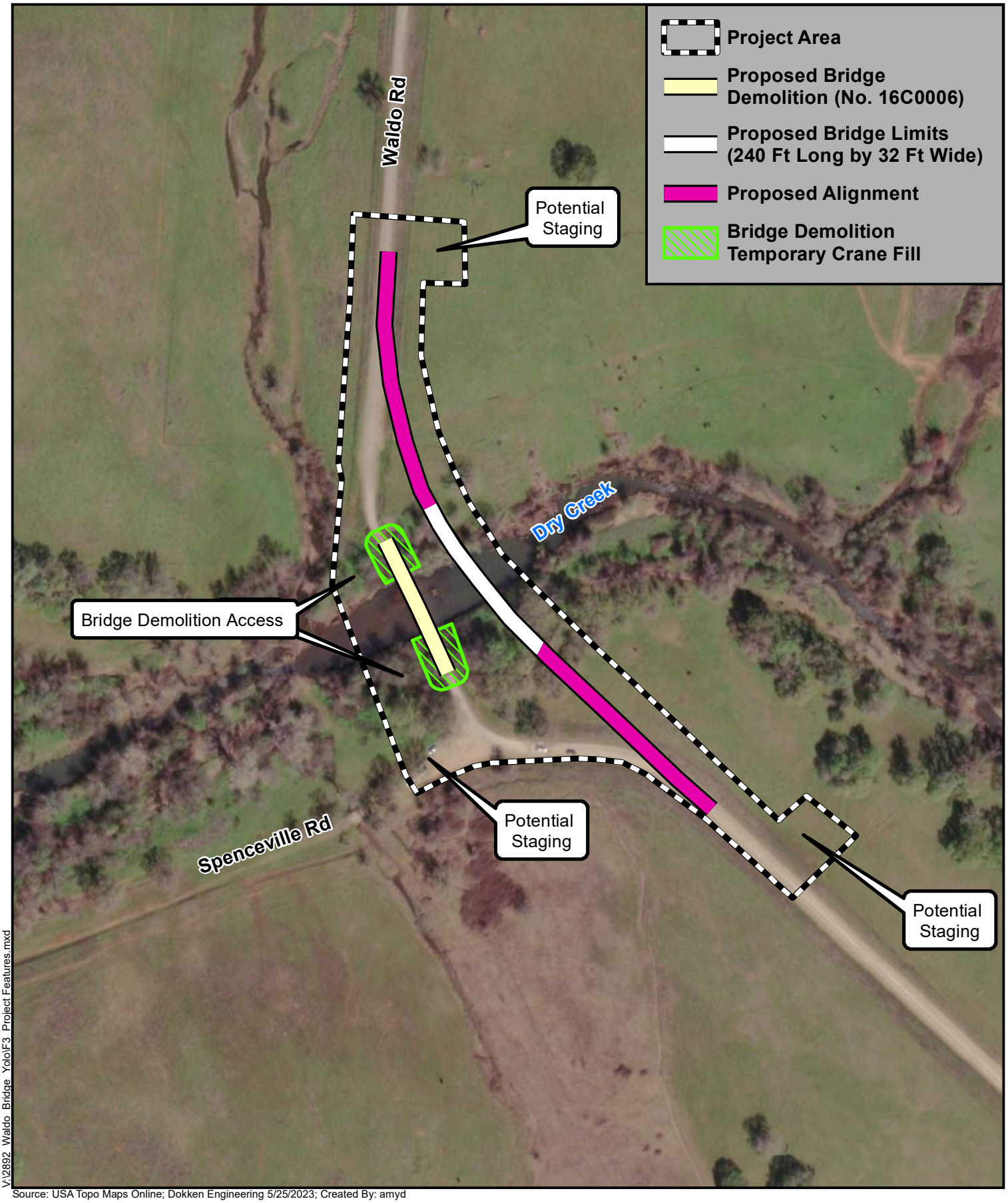
Figure 2
Project Location
Waldo Road Bridge over Dry Creek Replacement Project
BRLO-5916(092)
Yuba County California



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Source: USA Topo Maps Online; Dokken Engineering 5/25/2023; Created By: amyd

1 inch = 200 feet

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Figure 3
Project Features
Waldo Road Bridge over Dry Creek Replacement Project
BRLO-5916(092)
Yuba County California

3 ENVIRONMENTAL IMPACT ANALYSIS

As noted in Chapter 1, this Partially Recirculated Draft EIR focuses on specific chapters. Chapters 3.3 Biological Resources, 3.13 Tribal Cultural Resources, and 3.16 Mandatory Findings of Significance are presented here with a revised environmental setting and analysis. Text additions are marked via underlined text and a black vertical line within the left margin of each page.

3.3 BIOLOGICAL RESOURCES

Biological and botanical surveys were conducted based on the United States Fish and Wildlife Service's (USFWS) Sacramento office species list, CDFW California Natural Diversity Database (CNDDB) search, and the California Native Plant Society's (CNPS) list of rare and endangered plants (Appendix D in the Original Draft EIR). All species list inquiries derive from the United States Geological Survey (USGS) "Camp Far West" and surrounding eight 7.5- minute quadrangles. Based on the results of the species lists and habitat conditions, appropriate biological and botanical surveys were conducted. A habitat assessment was conducted on February 10, 2023 by Gallaway Enterprises' biologist, Alexander Smither. The habitat assessment was conducted by walking all accessible areas of the Biological Study Area (BSA) and evaluating potential habitat for special-status species based on vegetation composition and structure, surrounding area, presence of predatory species, microclimate, and available resources (e.g. prey items, nesting sites). On May 24, 2023, Ms. Gregg conducted a general botanical survey and a delineation of Waters of the U.S. (WOTUS) within the Project Boundary using the guidelines of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (2008).

A comment received from Beale Air Force Base, a United States Air Force base in Yuba County, during the Original Draft EIR's public review period noted that the Beale Lake Dam was removed in 2020 and that subsequent snorkel and eDNA surveys identified California Central Valley steelhead and Chinook salmon within Dry Creek upstream of the removed dam. This means that these species can now be present with the Project area. As such, the environmental setting, existing conditions, and analysis of impacts has been revised.

3.3.2 Revised Environmental Setting and Existing Conditions

The BSA incorporates the Project Boundary and 250 feet from the Project Boundary (**Figure 4**). The Project is located within the Sierra Nevada foothills and is surrounded by hill slope terrain typical of blue oak woodlands and the Sierra Nevada foothills. The elevation within the BSA ranges from approximately 252 feet, near Dry Creek, to approximately 280 feet, near the southern end of the Project Boundary. There are three types of soils within the BSA that are recognized by the United States Department of Agriculture (USDA) Natural Resource Conservation Service. The three soils include Auburn loam, 3 to 8 percent slopes, Auburn-Sobrante complex, 3 to 8 percent slopes and Ricecross loam, 0 to 2 percent slopes (NRCS 2022). Water bodies associated with the BSA include seasonal and riparian wetlands, Dry Creek, Vineyard Creek and Albion Creek. Seasonal wetlands within the BSA are attributed to roadway run off which pool in depressional areas or are associated with the fringes of perennial and ephemeral creeks. Riparian wetlands occur along Dry Creek where soils are less permeable. Dry Creek is a perennial, easterly tributary of Bear River, which drains water from the Sierra Nevada Mountains. Vineyard Creek is a northerly, ephemeral tributary of Dry Creek and Albion Creek is an ephemeral, southerly tributary of Dry Creek. Both ephemeral drainages drain water off the nearby Sierra Nevada foothills.

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Source: USA Topo Maps Online; Dokken Engineering 9/18/2023; Created By: ahale

1 inch = 200 feet

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Figure 4
Biological Survey Area
Waldo Road Bridge over Dry Creek Replacement Project
BRLO-5916(092)
Yuba County California

Biological Conditions

Vegetation communities and habitats within the BSA were identified during biological surveys and habitat assessments conducted on February 10, 2023 and May 24, 2023. The BSA consists of blue oak woodland, valley foothill riparian, annual grassland, wetlands, riverine, and barren habitats (**Figure 5**). Habitat types present within the BSA are described below:

Blue Oakwood

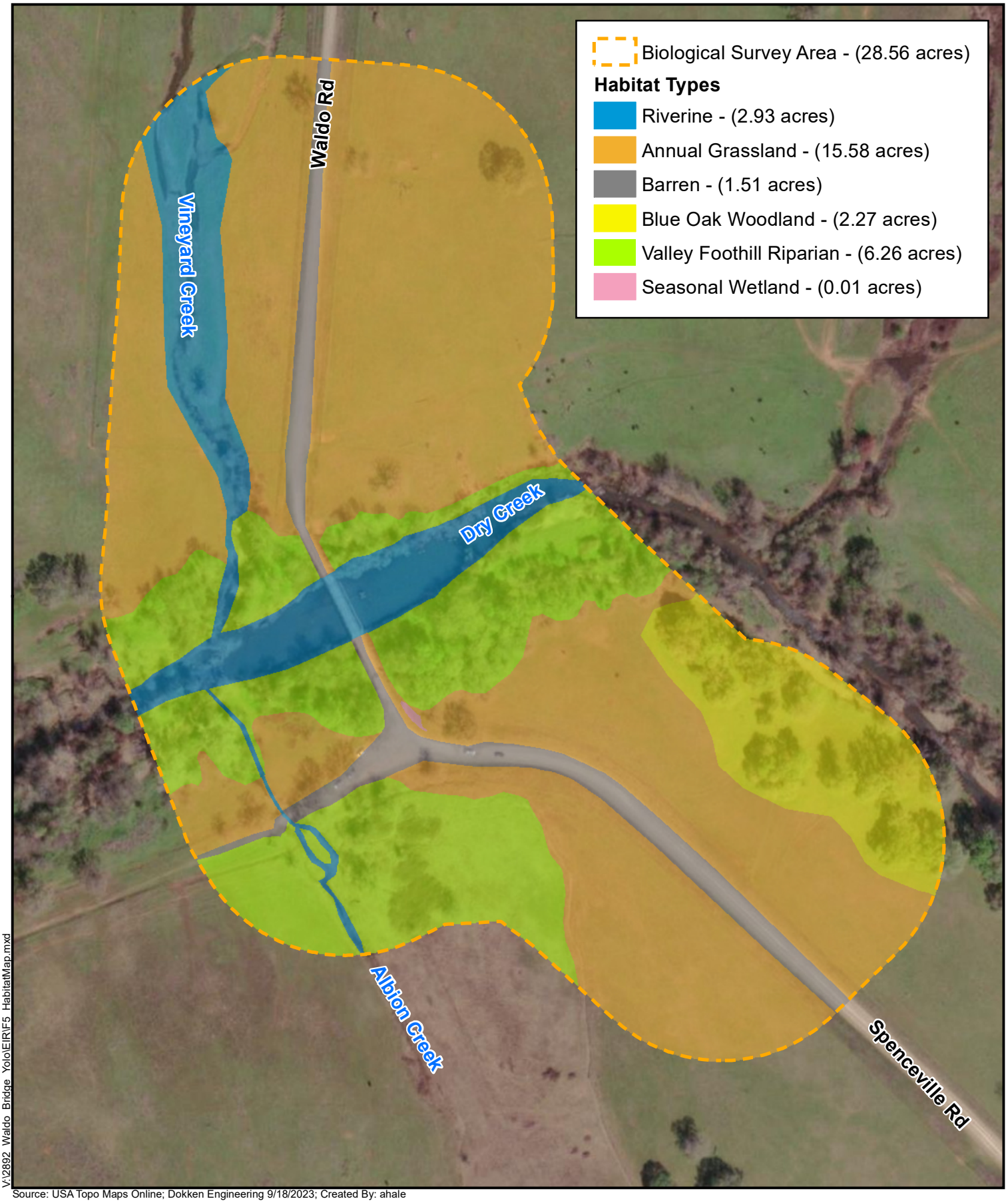
Blue oak woodlands occur on the outside fringes of the valley foothill riparian forest, which occur along Dry Creek. The blue oak woodlands consist of a mixture of old and young trees with the majority of the species consisting of blue oak (*Quercus douglasii*) and valley oak (*Quercus lobata*). Blue oak woodlands generally have an overstory of scattered trees on gentle sloping hills, often creating a savannah-like stand (Mayer and Laudenslayer 1988). Blue oaks make up to 85 to 100 percent of tree species composition and the understory is comprised of sparsely scattered shrubs and annual grass species. Species found in association with blue oak woodlands within the BSA include California coffeeberry (*Rhamnus californica*), poison oak (*Toxicodendron diversilobum*), and a variety of annual grassland species. Some of the species that were observed within the blue oak woodlands within and adjacent to the BSA included acorn woodpecker (*Melanerpes formicivorus*), Anna's hummingbird (*Calypte anna*), Lewis's woodpecker (*Melanerpes lewis*), and western fence lizard (*Sceloporus occidentalis*).

Valley Foothill Riparian

Valley foothill riparian habitat occurs on both sides of Dry Creek. This habitat is associated with Dry Creek and its seasonal flooding. Species found in association with valley foothill riparian habitat within the BSA include Fremont cottonwood (Populus fremontii), valley oak, California black walnut (Juglans californica), Oregon ash (Fraxnus latifolia), black willow (Salix goodingii), arroyo willow (Salix lasiolepis), narrowleaf willow (Salix exigua), California wild rose (Rosa californica), and Himalayan blackberry (Rubus armeniacus). According to Mayer and Laudenslayer's A Guide to Wildlife Habitats of California (1988), valley foothill riparian habitat functions as wildlife migration and dispersal corridors, escapement and nesting areas and provides food, shelter and water for a variety of species of resident and migrating wildlife species.

Annual Grasslands

Annual grasslands make up the majority of the BSA. Annual grasslands occur along Waldo Road and also make up the understory of blue oak woodlands within the BSA. Annual grassland habitats and species composition depend largely on annual precipitation, fire regimes, and grazing practices (Mayer and Laudenslayer 1998). Common species found in the annual grasslands in the BSA include rose clover (*Trifolium hirtum*), rip-gut brome (*Bromus diandrus*) wild oat (*Avena sp*.), soft chess (*Bromus hordeaceus*), and red brome (*Bromus madritensis ssp. rubens*). Invasive species such as yellow star-thistle (*Centaurea solstitialis*), medusahead grass (*Taeniatherum caputmedusae*), and Italian thistle (*Carduus pycnocephalus*) were also observed within the annual grasslands within the BSA (**Table 8**)**.** Wildlife species use grassland habitat for foraging, but require some other habitat characteristic such as rocky out crops, cliffs, caves or ponds in order to find shelter and cover for escapement. Species observed in the BSA within the annual grasslands included American goldfinch (*Spinus tristis*), lesser goldfinch (*Spinus psaltria*), California quail (*Callipepla californica*), and killdeer (*Charadrius vociferus*).



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Source: USA Topo Maps Online; Dokken Engineering 9/18/2023; Created By: ahale

1 inch = 200 feet

0 100 200 300 400 Feet

Figure 5
Habitat Map
Waldo Road Bridge over Dry Creek Replacement Project
BRLO-5916(092)
Yuba County California

Barren

Barren habitat within the BSA is comprised of gravel road, paved road and the existing bridge. Barren habitat is typified by non-vegetated soil, rock, paved roads, and gravel areas void of vegetation. It is typically considered low-quality habitat for most wildlife species, although some ground nesting avian species such as killdeer (Charadrius vociferous) and small reptiles such as western fence lizards (Sceloporus occidentalis) can be found breeding in barren habitat.

Seasonal and Riparian Wetlands

There are seasonal and riparian wetlands that occur within the BSA. Seasonal wetlands within the BSA are either attributed to roadway run off or associated with ephemeral creeks. Seasonal wetlands that occur along the roadway are depressional areas which water pools long enough to support hydrophytic vegetation and hydric soils. These wetlands occur near Waldo Junction (Waldo Road and Spenceville Road). Other seasonal wetlands within the BSA occur along Albion Creek and Vineyard Creek. Seasonal wetlands that are associated with Albion Creek and Vineyard Creek occur along the fringes of their ordinary high-water marks. Riparian wetlands occur along Dry Creek where soils are less permeable. These wetlands occur in areas, primarily along the north banks of Dry Creek. There is one seasonal wetland and one riparian wetland identified within the Project Boundary.

Dry Creek, Vineyard Creek, and Albion Creek (Riverine)

There are three creeks within the BSA: Dry Creek, Vineyard Creek, and Albion Creek. Dry Creek is a tributary of the lower Bear River, which is an easterly tributary of the Feather River. Dry Creek is a perennial creek rising west of Grass Valley and flowing through Spenceville Wildlife Area and Beale AFB. It drains water from the Sierra Nevada Mountains through mostly blue oak woodland habitat. Species observed within Dry Creek include American bullfrog (*Lithobates catesbeianus*), warm water fish species (e.g., sunfish), crawfish, and northwestern pond turtles.

The Beale Lake Dam had previously blocked salmon and steelhead fish species from accessing the upper reaches of the creek; however, this dam was removed in 2020. Since the removal of the Beale Lake Dam, Environmental DNA (eDNA) samples collected in 2021 noted that California Central Valley steelhead – DPS (*Oncorhynchus mykiss pop 11* [*O. mykiss pop.11*]), a federally listed threatened species was detected upstream of the dam location, which means that the species has the potential to be present in the Project area. Though not detected during snorkel surveys or eDNA sampling, there have been historical observations of Chinook salmon (*O. tshawytscha*) in Dry Creek, specifically *O. tshawytscha pop.13* which are not an ESA-listed species. Central Valley Spring-Run Chinook salmon ESU (*O. tshawytscha pop.11*) is listed as threatened under the Federal ESA, however, *O. tshawytscha pop.11* have never been documented utilizing Dry Creek. The absence of O*. tshawytscha pop.11* can be attributed to unsuitable environmental conditions associated with their life history.

Vineyard Creek is a small, northerly tributary of Dry Creek. It is an ephemeral stream which drains water from the Sierra Nevada foothills during portions of the wet season (October 15 – April 1). Vineyard Creek occurs within the BSA just west of the existing bridge. A large pool forms at the confluence of Vineyard Creek and Dry Creek during portions of the dry season (April 1 – October 15). Species observed within the seasonal pool include warm-water fish species, American bullfrogs, and crawfish.

Albion Creek is a small, southerly tributary of Dry Creek. It is an ephemeral drainage which crosses into the BSA briefly before draining into Dry Creek. It supports an extensive patch of wetland-associated blackberry (*Rubus* spp.) bushes within and just south of the BSA.

3.3.3 Thresholds of Significance

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, U.S. Fish and Wildlife Service, or NOAA Fisheries?*

b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

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

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

3.3.4 Environmental Impacts

IMPACT BIO-1: Potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries.

The Project would have **Less Than Significant Impact with Mitigation** on listed species and special status species. The No-Build alternative would result in **No Impact**. The BSA contains suitable habitat for *O. mykiss pop.11*, which is listed as threatened on the Federal Endanged Species Act (FESA) and also contains Essential Fish Habitat (EFH) for *O. tshawytscha pop.*11 although *O. tshawytscha pop.*11 has not been detected within the BSA. There is no designated critical habitat for CCV steelhead in the BSA or Action Area. These species and the following special status species have the potential to occur within the BSA:

- California Central Valley Steelhead – DPS (*O. mykiss pop.11*), and
- Chinook Salmon (*O. tshawytscha*)

On March 29, 2021 at 17 sampling locations along an approximate 4.3 mile stretch of Dry Creek, with eight (8) of the 17 samples being collected upstream of the Project site, had all yielded positive results for *O. mykiss*, though eDNA sampling cannot directly confirm whether the sample is from the anadromous *O. mykiss pop.11* or simply a resident *O. mykiss* (Gallaway Enterprises 2026; **Appendix F**). During a snorkel survey in late-May 2024, one (1) of three (3) *O. mykiss* observed lacked an adipose fin, consistent with the fish having hatchery origins (Gallaway Enterprises 2026; **Appendix F**). This observation confirms that *O. mykiss pop.11* can utilize Dry

Creek as juvenile rearing habitat. Both hatchery and natural origin *O. mykiss* from the Feather River basin are considered part of *O. mykiss pop.11* (Gallaway Enterprises 2026; **Appendix F**). Additionally, though limited, suitable spawning substrates have been identified throughout Dry Creek, notably where spawning gravel was introduced downstream of the Project site in December 2023 (Gallaway Enterprises 2026; **Appendix F**).

As noted above, though not detected during snorkel surveys or eDNA sampling, there have been historical observations of *O. tshawytscha* in Dry Creek, specifically *O. tshawytscha pop.13* which are not a FESA-listed species. Central Valley Spring-Run Chinook salmon ESU (*O. tshawytscha pop.11*) is listed as threatened under the FESA but have never been documented utilizing Dry Creek. The absence of *O. tshawytscha pop.11* can be attributed to unsuitable environmental conditions associated with their life history.

The potential for listed salmonid presence within the BSA can be inferred by environmental factors and the time of year. Critical temperature for salmonids and salmonid eggs refer to when the water temperatures begin to cause significant stress and fitness to the fish and eggs. Generally, the critical temperature threshold for salmonid egg incubation is 55 degrees Fahrenheit and the threshold for salmonid survival overall is 68 degrees Fahrenheit (Gallaway Enterprises 2026; **Appendix F**). Water temperatures above these thresholds are detrimental to salmonid survival, thus an analysis on historic environmental conditions within Dry Creek can help determine when and where listed salmonids may be throughout the waterway and at what times of year. Water quality data collected by USFWS from 2015 to 2016, as part of the Dry Creek/Best Slough Baseline Habitat Assessment, and by Sierra Streams Institute (SSI) from 2022 to 2025, as part of their ongoing Dry Creek Riparian Restoration Management Project, confirm that water temperatures during the time of year *O. mykiss pop.11* spawn; typically mid-December through May, peaking in mid-March depending on the yearly environmental conditions; historically fall within the optimal temperature range for egg incubation and embryo survival throughout Dry Creek (Gallaway Enterprises 2026; **Appendix F**). *O. tshawytscha pop.11* typically spawn from mid-August to mid-October, peaking in mid-September depending on the yearly environmental conditions, with adults initially entering their natal river systems (i.e. Sacramento River Basin) in the spring and holding in cool-water pools throughout the river system through the late spring and summer months. Dry Creek does not provide the necessary water temperatures suitable for adult *O. tshawytscha pop.11* holding or spawning, as average water temperatures in Dry Creek during the typical *O. tshawytscha pop.11* spawning period are consistently higher than 60 degrees Fahrenheit.

Therefore, there is a high potential for California Central Valley steelhead (*O. mykiss pop.11*) to be present within the BSA while there is a low potential for Fall-Run/Late-Fall-Run Chinook salmon (*O. tshawytscha pop.11*) to be present with the BSA. As Dry Creek does not provide the necessary water temperatures suitable for adult *O. tshawytscha pop.11* holding or spawning, this species is not further discussed; however, the EFH for Chinook salmon (*O. tshawytscha*) is discussed below.

California Central Valley steelhead (O. mykiss pop.11) – Effects

With implementation of **BIO-7**, **BIO-21**, and **BIO-43** through **BIO-49**, there will be no direct or indirect impacts to California Central Valley steelhead (*O. mykiss pop.11*). *O. mykiss pop.11* typically spawn from mid-December through May, peaking in mid-March, and egg incubation will occur from mid-December through July, both spawning and incubating dependent on the local environmental conditions within the natal tributary. In Dry Creek specifically, the ideal conditions for spawning and egg incubation based on the water quality data collected by USFWS and SSI would likely be from mid-December through mid-April. Average temperatures from mid-April through July would far exceed the 55 degrees Fahrenheit critical temperature for salmonid egg

survival. Once the fry emerge, juvenile rearing within Dry Creek, specifically the action area where water depth is shallow likely resulting in above average water temperatures, likely occurs through mid-June before the average temperatures exceed the 68^0F critical temperature for salmonid survival. At this point, it is likely that *O. mykiss pop.11* juveniles would move downstream to larger tributaries where cooler water temperatures are more likely to be found. Adult *O. mykiss pop.11* migration typically begins in mid-July, where they enter the lower reaches of the Sacramento River basin, holding in larger tributaries with suitable water temperatures, until their natal tributaries (i.e. Dry Creek) fall within the necessary temperature thresholds for survival. Based on water quality data, adult *O. mykiss pop.11* could begin their migration up Dry Creek as early as October and hold in pools along the waterway until spawning in mid-December when temperatures are in the range for egg incubation.

Based on this analysis, *O. mykiss pop.11* of any life stage would not be expected to occur within the BSA definitively from July through September, with the possibility of adult migration or juvenile emigration beginning in October, should the conditions be conducive to such movement. Project effects on *O. mykiss pop.11* would include the removal of riparian vegetation along Dry Creek, added shade from the construction of a larger profile bridge, and increased turbidity during in-water work. **BIO-43** would restrict activities within the active channel of Dry Creek to the timeframe between July 1 and October 31. **BIO-21** and **BO-44** through **BIO-48** would ensure overall water quality and safe passage of the fish through use of water diversion, biological monitoring, erosion control plan to avoid sediment runoff, restoration of the streambed to pre-construction conditions, and a spill prevention plan to prevent toxins from entering the waterway.

Riparian vegetation removal, specifically vegetation/trees within 50 feet of the OHWM, affects the sun exposure along the waterway which can be detrimental to salmonids. Shade from riparian vegetation regulated water temperature, which is a key factor in juvenile salmonid survival while rearing. Regulated water temperatures from riparian vegetation shade within a waterway increases the growth and survival of aquatic vegetation and invertebrates as well, that provide cover and forage from growing salmonids. **BIO-7** would limit the amount of vegetation removed and **BIO-49** would require the Project to revegetate the impacted banks of Dry Creek.

Added shade from the construction of the new Waldo Road bridge which features a larger profile than the old bridge, can also be detrimental to salmonids. The new bridge construction will create approximately 0.07 acres of shade over Dry Creek, while the demolition of the old bridge will remove 0.04 acres of shade over Dry Creek, thus results in 0.03 acres of shade added from a bridge/man-made structure over Dry Creek (**Figure 6b**). While shade created by bridges can affect the upstream and downstream movement of salmonids and increase the risk of predation due to changes in light exposure in more vulnerable areas of a waterway where predators may lay and wait to ambush prey; however, this is a minimal change and is not anticipated to adversely affect the species.

The National Marine Fisheries Service (NMFS) was consulted under Section 7 of the FESA regarding the above impacts and proposed avoidance and minimization measures in January 2026. In a letter dated March 27, 2026, NMFS concurred that through implementation of these measures the Project would not adversely affect the California Central Valley steelhead *(O. mykiss pop.11)*.

Chinook Salmon (O. tshawytscha) EFH – Effects

Despite not providing suitable habitat for *O. tshawytscha pop.11,* Dry Creek is considered Chinook salmon EFH under the MSA and is known to support a population of *O. tshawytscha pop.13.* Project effects on Chinook salmon EFH include the removal of riparian vegetation along Dry Creek, added shade from the construction of a larger profile bridge, and increased turbidity during

in-water work, much like effects described above.

Riparian vegetation removal, specifically vegetation/trees within 50 feet of the OHWM, affects the sun exposure along the waterway which can be detrimental to salmonids. Shade from riparian vegetation regulated water temperature, which is a key factor in juvenile salmonid survival while rearing. Regulated water temperatures from riparian vegetation shade within a waterway increases the growth and survival of aquatic vegetation and invertebrates as well, that provide cover and forage from growing salmonids. **BIO-7** would limit the amount of vegetation removed and **BIO-49** would require the Project to revegetate the impacted banks of Dry Creek.

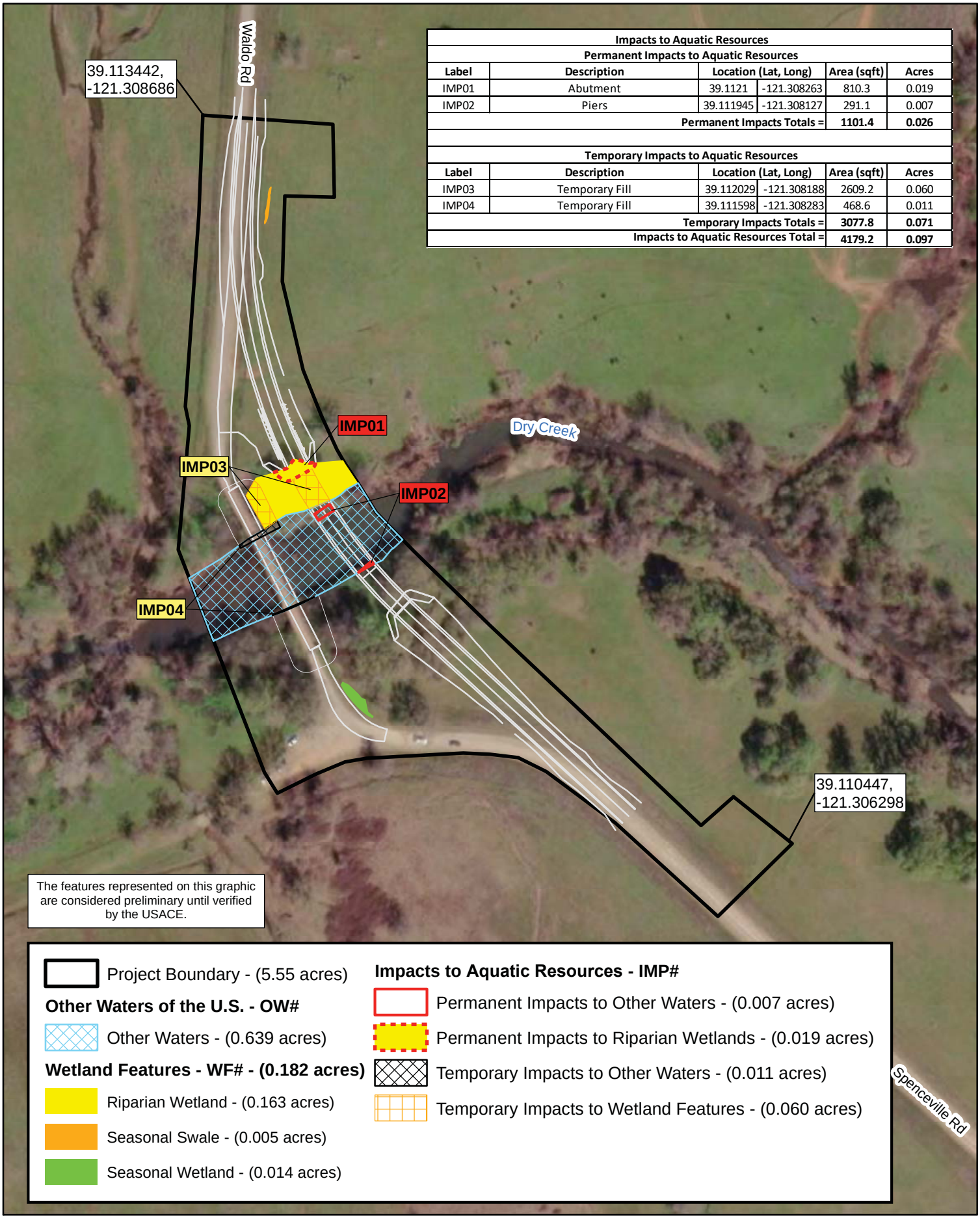
Added shade from the construction of the new Waldo Road bridge which features a larger profile than the old bridge, can also be detrimental to salmonids. The new bridge construction will create approximately 0.07 acres of shade over Dry Creek, while the demolition of the old bridge will remove 0.04 acres of shade over Dry Creek, thus results in 0.03 acres of shade added from a bridge/man-made structure over Dry Creek (**Figure 6a, 6b**). Shade created by bridges can affect the upstream and downstream movement of salmonids and increase the risk of predation due to changes in light exposure in more vulnerable areas of a waterway where predators may lay and wait to ambush prey; however, this is a minimal change and is not anticipated to adversely affect the species.

A temporary water diversion structure will be installed in the vicinity of the new Waldo Road Bridge to provide a working area to establish two (2) in-channel piers. The temporary water diversion will be constructed by placing a shoring system (likely comprised of a K-rail) and pushing clean river gravel into Dry Creek from the banks while leaving an approximately 40-foot-wide opening for water to move through the site. Upon completion it is expected that the clean river gravel will be removed to the greatest extent possible by extracting material from the center of the pad and then leaving the outer ring of gravel at the end of construction to provide habitat for aquatic organisms. This activity will result in approximately 0.124 acres of temporary fill of Chinook salmon EFH and increases in turbidity as a result of the installation and removal of the gravel material.

Temporary pads of gravel will also be installed at the abutments of the existing bridge in order to facilitate equipment access in support of dismantling and removal of the bridge. This activity will result in approximately 0.041 acres of temporary fill of Chinook salmon EFH and increases in turbidity as a result of the installation and removal of the gravel material. Increases in turbidity can be indirectly detrimental to Chinook salmon EFH, should the turbidity plumes and sediment drift occur during the time of year salmonid egg incubation occurs. As discussed previously, in-water construction will only occur outside of the spawning and egg incubation time frames for all salmonid species, listed and not listed, that utilize Dry Creek. Through implementation of **BO-44**, **BIO-45**, and **BIO-48**, a silt screen will be installed to prevent sediment drift, disturbance within Dry Creek would be kept to a minimum, and the streambed would be restored to pre-construction conditions.

The establishment of the two in-water piers for the new bridge will result in 0.006 acres of permanent impacts to Chinook salmon EFH, while the removal of the footings of the existing bridge will result in an increase of approximately 0.002 acres of Chinook salmonid EFH for a total loss of approximately 0.004 acres of Chinook Salmonid EFH; this is a minimal amount and would not adversely affect the EFH.

NMFS was consulted under Section 7 of the FESA regarding the above impacts and proposed avoidance and minimization measures in January 206. In a letter dated March 27, 2026, NMFS concurred that through implementation of these measures the Project would not adversely affect the Chinook salmon EFH.



Impacts to Aquatic Resources					
Permanent Impacts to Aquatic Resources					
Label	**Description**	**Location (Lat, Long)**		**Area (sqft)**	**Acres**
IMP01	Abutment	39.1121	-121.308263	810.3	0.019
IMP02	Piers	39.111945	-121.308127	291.1	0.007
			Permanent Impacts Totals =	**1101.4**	**0.026**
Temporary Impacts to Aquatic Resources					
Label	**Description**	**Location (Lat, Long)**		**Area (sqft)**	**Acres**
IMP03	Temporary Fill	39.112029	-121.308188	2609.2	0.060
IMP04	Temporary Fill	39.111598	-121.308283	468.6	0.011
			Temporary Impacts Totals =	**3077.8**	**0.071**
			Impacts to Aquatic Resources Total =	**4179.2**	**0.097**

NORTH

1:2,000 1 inch = 167 feet

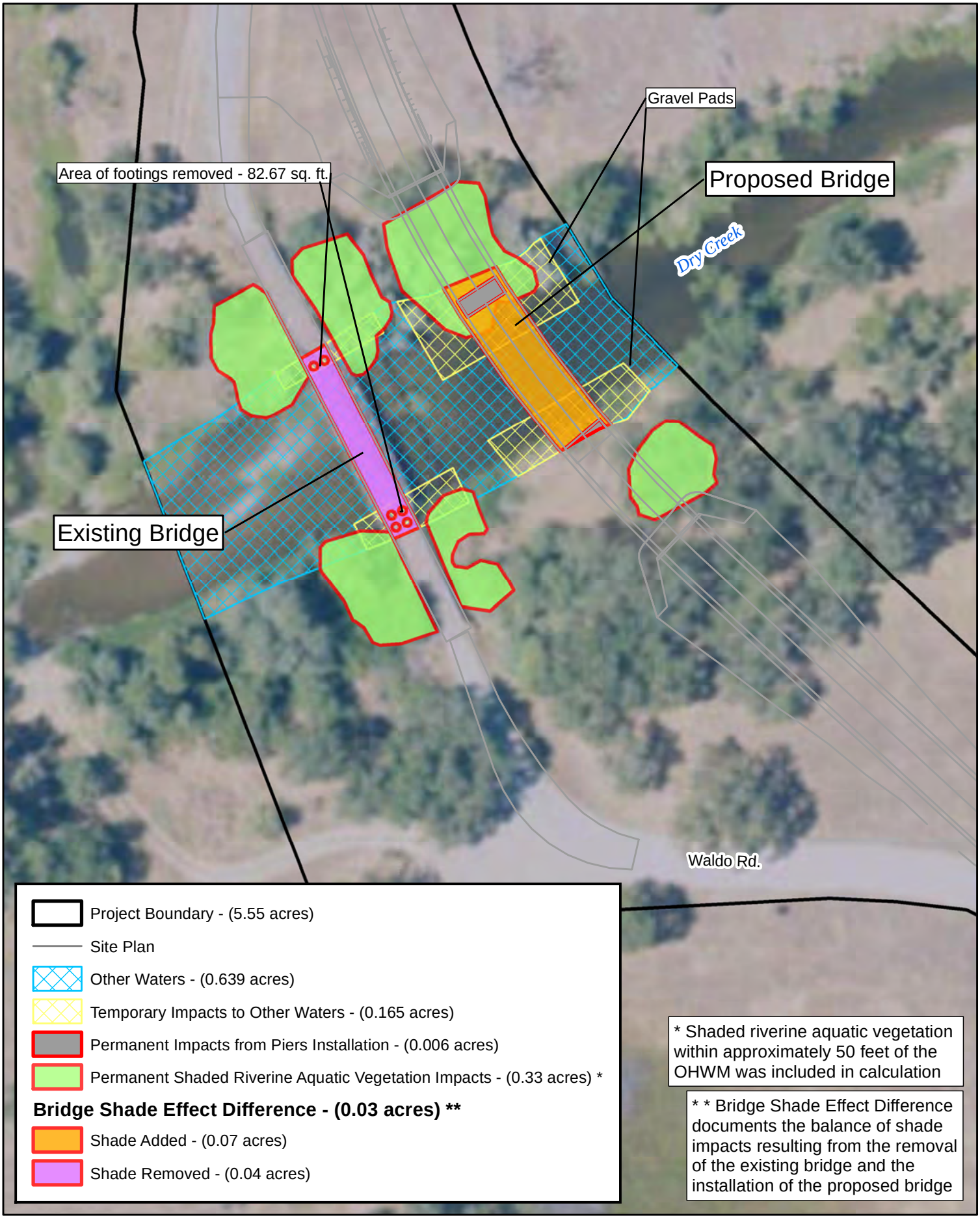
0 75 150 Feet

Data Sources: ESRI, Yuba County, Dokken Engineering, Maxar 03/22/2023

Waldo Road Bridge Replacement Project
Preliminary Impacts to Aquatic Resources
Figure 6a

gallaway ENTERPRISES

GE: #18-096 Map Date: 06/06/2023



NORTH

1:800

0 25 50 Feet

Data Sources: ESRI, Yuba County, Dewberry Engineering, NAIP 2022

Waldo Road over Dry Creek Bridge Replacement Project
Impacts to Essential Fish Habitat
Figure 6b

gallaway ENTERPRISES

GE: #18-096 Date: 12/17/2025

Northwestern pond turtle (NWPT)

The NWPT is a CDFW Species of Special Concern and is proposed to be listed under the FESA as a threatened species. NWPTs are native to the west coast and are found from Baja California, Mexico north through Klickitat County, Washington. The NWPT is a fully aquatic turtle, inhabiting ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. The species requires suitable basking sites such as logs, rocks and exposed banks and associated upland habitat consisting of sandy banks or grassy open fields for reproduction. The species is omnivorous, consuming aquatic wildlife and vegetation. The NWPT may overwinter in aquatic or muddy substrates or on land as far as 1640 feet from aquatic habitat. NWPT that overwinter in upland habitat can begin movements as early as 25 August (peaking between September and October) through 30 November. NWPT will begin moving back to aquatic habitat between 1 February and 1 May. Nests are generally found on south facing slopes in flat areas with low vegetation and dry, hard soil. Dry Creek is a perennial stream with seasonal slow to stagnant waters and runs through the BSA. There are rock outcroppings and woody debris within Dry Creek that provide areas for basking and cover for NWPT.

The closest CNDDB occurrence is located in Dry Creek approximately 1 mile east of the existing Waldo Road Bridge (CNDDB 2023). The occurrence was recorded in 2008 by CDFW on a field survey for NWPT.

There is high potential for NWPT to be present within the BSA for the following reasons:

1. There is suitable habitat present within the BSA; and
2. There is a CNDDB occurrence within 1 mile of the BSA.

With implementation of **BIO-7** through **BIO-8,** there will be no direct or indirect impacts to NWPT. Direct impacts to NWPT will be avioded by conducting a pre-construciton survey and installing exclusion fencing. Indirect impacts will be avoided by implementing BMPs for water quality and mitigating for the loss of riparian vegetation. Staging areas will be located a minimum of 250 feet from riparian areas and aquatic habitats in order to prevent leaks or spills from fueling or maintenance of construction equipment from entering into water systems. All construction activities within the riparian habitat along Dry Creek will be kept to a minimum to minimize the loss of vegetation. All disturbed areas that will not receive fill and that is feasible with the bridge and roadway realignment design will be restored to riparian habitat by planting in-kind species.

Western Spadefoot

The western spadefott (*Spea hammondii*) is a SSC in California. Within the BSA, suitable habitat for the western spadefoots consists of seasonal wetlands adjacent to grasslands but can also be found in valley foothill hardwood woodlands.

There is a low potential for western spadefoot to occur within the BSA for the following reasons:

1. There is suitable habitat in the form of seasonal wetlands, grassland, and valley foothill hardwood habitat present within the BSA,
2. Wetland habitat within the BSA is marginal;
3. No western spadefoots were observed during the site visit; and
4. The nearest CNDDB occurrences is 14 miles from the BSA.

There will be no direct or indirect impacts to western spadefoot. Direct impacts to western spadefoot will be avoided with the implementation of avoidance and minimization measures **BIO-9** and **BIO-10**.

Burrowing Owl

The burrowing owl is not a state or federally listed species but as of October 10, 2024, was designated as a "candidate species" under the CESA by CDFW. The candidacy designation temporarily applies CESA protections, including protection from "take" of the species without permit authorization, while CDFW determines the species should be listed as threatened or endangered. Burrowing owls prefer habitat with short, sparse vegetation and unoccupied animal burrows. Burrowing owls have site fidelity, often returning to the same location each year. No burrowing owls, unoccupied animal burrows, or signs of burrowing owls were observed during the site visit. There is suitable foraging habitat present within the BSA in the form of annual grasslands. There is low potential for burrowing owls to occur within the BSA for the following reasons:

1. There are no burrowing owl CNDDB records within 5 miles of the BSA;
2. No suitable nesting habitat was observed within the BSA; and
3. There is suitable foraging habitat present within the BSA.

With the implementation of avoidance and minimization measures following the CDFW Staff Report on Burrowing Owl Mitigation (**BIO-11** through **BIO-14**), there will be no direct or indirect impacts to burrowing owls.

California black rail

The California black rail (*Laterallus jamaicensis coturniculus*) is threatened under the CESA and is a Fully Protected species under the CFGC. California black rails prefer freshwater, palustrine emergent, persistent wetlands dominated by rushes, sedges and cattails. There are small, wetland fringes that consist of rushes, sedges and Himalayan blackberry along Vineyard Creek and Albion Creek within the BSA. These wetlands are not palustrine emergent, persistent wetlands and dry seasonally. The closest CNDDB occurrence of California black rail is located along Albion Creek within the BSA. The occurrence was recorded between 2006 and 2008 during Richmond et al. survey of California black rails within the Sierra Nevada foothills. The occurrence is approximately 150 feet from the Project area. According to Jerry Tecklin, who recorded the observation and is the second author of the Richmond et al. 2008 Distribution of California Black Rails in the Sierra Nevada Foothills, this specific location near Albion Creek contains marginal habitat and does not always have occupying California black rails. The area is viewed as marginal as water levels within the wetland area vary yearly and often do not provide adequate water levels for California black rail occupancy.

There are four additional CNDDB occurrences of California black rails within a 1 mile radius of the BSA, and multiple CNDDB occurrences within a 5 mile radius of the BSA (CNDDB 2023). These occurrences are a part of the Sierra Nevada California black rail metapopulation.

There is high potential for California black rails to occur within BSA for the following reasons:

1. There are multiple CNDDB records of California black rail within a 1 mile radius of the BSA;
2. There is suitable habitat present within the BSA.

With the implementation of avoidance and minimization measures (**BIO-15** through **BIO-21**), there will be no direct or indirect impacts to California black rails. Direct impacts will be avoided by beginning construction activities prior to the avian breeding season (March 1 – August 31) or conducting a protocol-level survey to determine absence or presence of California black rails within the BSA and implementing avoidance and minimization measures. Beginning construction activities prior to the avian breeding season will deter California black rails from nesting within close proximity of the Project site; therefore avoiding potential direct impacts to the species. If construction activities cannot occur prior to the avian breeding season, then a protocol-level survey will be conducted to determine the absence or presence of California black rails within the BSA. If California black rails are detected, then CDFW will be contacted for further guidance so as to avoid direct impacts to the species. All construction equipment and personnel will remain within designated routes and areas within the Project area to avoid impacts to California black rails and suitable habitat areas.

Swainson's hawk

Swainson's hawks (*Buteo swainsoni*) are listed as threatened in the state of California. Swainson's hawks prefer open grassland habitats, agricultural fields, and pastures that are adjacent to woodland areas or riparian forests. The BSA contains open grassland areas adjacent to riparian and blue oak woodland habitats. The open grassland areas provide foraging habitat for Swainson's hawks, while the blue oak woodlands and riparian forest provide nesting trees.

The closest Swainson's hawk CNDDB occurrence is located approximately 5.6 miles west of the Project and was recorded in 2004 (CNDDB 2023).

Although suitable foraging and nesting habitat is present, there is low potential for Swainson's hawk to occur within the BSA for the following reasons:

1. There is suitable foraging and nesting habitat present within the BSA;
2. There are no CNDDB occurances within 5 miles of the BSA;
3. Documented nests within 10 miles of the BSA are from 14+ years ago; and,
4. No Swainson's hawks were observed during field surveys.

With the implementation of avoidance and minimization measures (**BIO-22** and **BIO-23**), there will be no direct or indirect impacts to Swainson's hawks as a result of Project activities. Direct and indirect impacts to Swainson's hawks will be avoided by starting construction prior to the avian breeding season (March 1 – August 31) or by conducting a pre-construction survey if construction activities will begin within the avian breeding season. Starting construction activities prior to the avian breeding season will deter Swainson's hawks from nesting within the area where they could potentially be impacted by activities. Conducting a pre-construction survey prior to the start of construction will determine if there are any active Swainson's hawk nests within a quarter-mile of the Project Boundary. If a Swainson's hawk nest is observed, CDFW will be contacted for further guidance and potential additional avoidance and minimization measures may be implemented to avoid impacts.

Tricolored Blackbird

Tricolored blackbirds (*Agelaius tricolor*) are listed as threatened under the CESA. There is suitable nesting habitat for tricolored blackbirds within the BSA where dense patches of blackberry brambles and willow thickets occur, and the surrounding open grasslands provide suitable foraging habitat. There is one tricolored blackbird CNDDB occurrence within 5 miles of the BSA (CNDDB 2023).

There is moderate potential for tricolored balckbird to occur within the BSA for the following reasons:

1. There is suitable habitat present within the BSA; and
2. There is one CNDDB occurrence within 5 miles of the BSA.

With the implementation of avoidance and minimization measures (**BIO-24** and **BIO-25**), there will be no direct or indirect impacts to tricolored blackbird.

Grasshopper Sparrow

Grasshopper sparrows (*Ammodramus savannarum*) are listed as SSC in California. The annual grasslands within the BSA provide suitable habitat for grasshopper sparrows. There is low potential for grasshopper sparrow to occur within the BSA for the following reasons:

1. There is only one CNDDB occurrence of grasshopper sparrow just outside of the BSA from 1994; and
2. There is suitable habitat present within the BSA.

With the implementation of avoidance and minimization measures (**BIO-24** and **BIO-26**), there will be no direct or indirect impacts to grasshopper sparrows.

Long-eared Owl

Long-eared owls (*Asio otus*) are listed as SSC in California. Long-eared owls prefer dense forested habitat with open areas for hunting. There is suitable nesting habitat present within the BSA in the form of riparian forest and oak woodlands. There is low potential for long-eared owls to occur within BSA for the following reasons:

1. There is riparian forest and oak woodlands next to open grassland areas within the BSA;
2. Forests within the BSA are relatively thin; and
3. There is one CNDDB records within a 2-mile radius of the BSA

With the implementation of avoidance and minimization measures (**BIO-24** and **BIO-27**), there will be no direct or indirect impacts to long-eared owls.

Northern Harrier

Northern harriers (*Circus hudsonius*) are listed as SSC in California. There is suitable nesting and foraging habitat in the open grassland areas within the BSA and CNDDB occurrences within a 5-mile radius of the BSA. Therefore, there is moderate potential for northern harriers to occur within the BSA. With implementation of avoidance and minimization measures (**BIO-24** and **BIO-28**), there will be no direct or indirect impacts to northern harriers.

Song sparrow – "Modesto" population

Song sparrow – "Modesto" population (*Melospiza melodia*) are listed as SSC in California. Modesto population song sparrows prefer freshwater marsh or oak riparian habitat. There is low potential for Modesto population song sparrows to occur within BSA for the following reasons:

1. There is suitable riparian forest habitat; and,
2. There is only one CNDDB occurrence 9 miles from the BSA.

With the implementation of avoidance and minimization measures (**BIO-24** and **BIO-29**), there will be no direct or indirect impacts to Modesto population song sparrows.

Yellow Warbler

Yellow warblers (*Setophaga petechia*) are listed as SSC in California. There is a moderate potential for yellow warblers to occur within the BSA since there is suitable nesting habitat (riparian forest) and there is a CNDDB occurrence within 2 miles of the BSA (CNDDB 2023). With the implementation of avoidance and minimization measures (**BIO-24** and **BIO-30**), there will be no direct or indirect impacts to yellow warblers.

Yellow-breasted Chat

Yellow-breasted chats (*Icteria virens*) are listed as SSC in California. There is suitable habitat and records of nesting yellow-breasted chats in association with yellow warblers along Dry Creek east of the BSA. Additionally, there is a CNDDB occurrence within 5- miles of the BSA (CNDDB 2023). Therefore, there is a moderate potential for yellow-breasted chat to occur within the BSA. With the implementation of avoidance and minimization measures (**BIO-24 to BIO-31**), there will be no direct or indirect impacts to yellow-breasted chats.

Pallid Bat

Pallid bats (*Antrozous pallidus*) are designated as a CDFW SSC. Bats with the potential to roost within the Waldo Road bridge include the Townsend's bigeared bat and the pallid bat. These bat species are known to form large maternity colonies and are recognized as a California SSC. During the biological resource evaluations conducted on February 10, 2023, there were no signs of bats roosting within the existing bridge. The timing of the survey may have limited the ability to detect bats. The most active time for bats is spring to late summer when insects are most available and temperatures at night are warm. It is during this active period where colonial roosting bats form maternity colonies and females give birth and raise their young (April 1 – August 31). During the fall and winter, bats go into torpor or migrate to warmer climates. Some bat species leave their maternity roosts and migrate locally to more suitable winter roosts. There is low potential for a maternity colony of pallid bats to occur within the existing Waldo Road Bridge for the following reasons:

1. The bridge provides suitable crevices for roosting bats;
2. A similar bridge structure 1.5 miles north contained a large colony of bats;
3. The surrounding area is undeveloped and largely absent of human disturbances.

With the implementation of avoidance and minimization measures (**BIO-35** through **BIO-37**) there will be no direct or indirect impacts to bat species. Direct and indirect impacts to maternity colonies will be avoided by starting bridge removal activities and construction activities prior to the nonvolant period (April 1 – August 31). Starting bridge removal and bridge construction activities prior to the non-volant period will avoid potential impacts to bats by deterring them from forming a maternity colony within the existing bridge.

If bridge removal activities on the existing Waldo Road Bridge cannot take place prior to the non-volant period, then exclusion and monitoring activities will be implemented. Preventing bats from roosting within the existing bridge will prevent the potential presence of a maternity colony and potential impacts caused by bridge removal activities.

If bridge removal of the existing Waldo Road Bridge is conducted prior to the non-volant period, yet construction activities for the new bridge cannot take place prior to the nonvolant period than a pre-construction bat exit survey will be conducted. If a bat roost is observed, then additional avoidance and minimization measures will be implemented that will reduce potential impacts to the bat colony. Avoidance and minimization measures will minimize human disturbances around

the existing bridge during construction. Minimizing human disturbances around the bridge will allow bats to roost within the bridge without causing significant impacts to the colony.

Western Red Bat

The western red bat (*Lasiurus blossevillii*) is a SSC in California. Western red bats prefer roosting in riparian forests associated with large cottonwoods and sycamore trees. They can also be found roosting in oak woodlands and orchards adjacent to water bodies. Western red bats are solitary roosting bats and will roost in the foliage of large trees.

Within the riparian habitat along Dry Creek there are large valley oak and Fremont cottonwoods. These trees serve as suitable roosting habitat for western red bats. Open grasslands occur next to the riparian habitat, which function as adjacent foraging habitat. The surrounding landscape is also largely undeveloped and undisturbed by human activities. Nearby water sources such as Dry Creek also make this area ideal for roosting western red bats.

The closest CNDDB occurrence is approximately 9 miles north of the Project site along Porter Creek. According to the CNDDB, the occurrence was recorded in 2006 (CNDDB 2023). There are no other CNDDB occurrences within 30 miles of the BSA. There were no western red bats observed during the biological evaluation conducted on Feburary 10, 2023.

There is moderate potential for western red bats to occur within BSA for the following reasons:

1. There is suitable roosting habitat within the BSA;
2. The suitable roosting habitat is adjacent to suitable foraging habitat; and,
3. The surrounding area is undeveloped and largely absent of human disturbances.

With the implementation of avoidance and minimization measures (**BIO-38** through **BIO-40**), there will be no direct or indirect impacts to western red bats. Direct impacts will be avoided by conducting a pre-construction survey prior to the start of construction activities. If roosting western red bats are found, additional avoidance and minimization measures may be implemented to avoid impacts to western red bats. Potential indirect impacts will be avoided by mitigating for the loss of riparian vegetation onsite. A vegetation plan will be created that will mitigate on-site for the loss of riparian habitat. All disturbed areas that will not receive fill will be restored to riparian habitat by planting in-kind species when feasible with the bridge and roadway realignment design.

IMPACT BIO-2: Potential to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service.

It is anticipated that a small portion of riparian and oak woodland habitat will be removed in order to construct the roadway realignment and new bridge. All trees associated with riparian and oak woodland habitat that are 4 inches DBH and larger will be mitigated for at a 3:1 ratio onsite (**Table 8**). Should it be determined that onsite mitigation is infeasible, an offsite mitigation option or other approved methods would be considered during the permitting phase of the Project. A vegetation plan will also be created. Trees to be replanted will represent the species of trees that are removed. During biological surveys, an inventory of tree species and their DBH were recorded for trees that would potentially be removed. Trees that will be removed reside on the northeast and southeast side of the existing bridge. On the northeast side of the existing bridge approximately one blue oak, four Oregon ash, one California black walnut, and nine narrowleaf willow will be potentially removed. On the southeast side of the existing bridge, approximately sixty-five valley

oak, fifteen Oregon ash, and one California black walnut will be potentially removed. Of those trees that will potentially be removed, a total of one blue oak, eighteen Oregon ash, two California black walnut, forty-eight valley oak and nine narrowleaf willow shall be mitigated at a 3:1 ratio on-site as these trees demonstrate a DBH of four inches and greater and are associated with riparian habitat and/or oak woodland habitat (**Table 8**). With implementation of **BIO-1**, impacts related to the proposed Project would be **Less than Significant with Mitigation**. The No-Build alternative would result in **No Impact**.

Table 8. Number of Trees and Tree Species to be Mitigated

Scientific Name	Common Name	Number of Trees 4" DBH and greater			Mitigation Ratio	Number of Trees Mitigated
		NE	SE	Total		
Quercus douglasii	Blue Oak	1	0	**1**	3:1	3
Fraxnus latifolia	Oregon Ash	4	14	**18**		54
Juglans californica	California Black Walnut	1	1	**2**		6
Quercus lobata	Valley Oak	0	48	**48**		144
Salix exigua	Narrowleaf Willow	9	0	**9**		27
Total						**234**

IMPACT BIO-3: Potential to 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.

Wetlands within the Project Boundary include one seasonal wetland, one riparian wetland, and one seasonal swale. The riparian wetland is located on the northeast bank of Dry Creek and the existing Waldo Road Bridge. During high flows of Dry Creek this area is sufficiently inundated and drains slowly, which create wetland conditions not found in the riparian forest on the opposite shore. There are 0.199 acres of wetlands within the Project area. Additionally, Dry Creek, a WOTUS, is present in the Project Boundary and encompasses a total of 0.639 acres.

Construction of the Project would result in approximately 0.019 acres of permanent impacts and 0.011 acres of temporary impacts to riparian wetland features and 0.007 acres of permanent impacts and 0.011 acres of temporary impacts to Dry Creek (**Figure 6a**). No impacts will occur to the seasonal wetland or seasonal swale within the Project boundary.

A CDFW 1602 Lake and Streambed Alteration Agreement, RWQCB 401 Water Quality Certification and Corps 404 Nationwide 14 permit will be necessary as vegetation removal, discharges, and dredging will occur within WOTUS during the construction of the roadway realignment and new bridge. With implementation of **BIO-41**, mitigation for impacts to jurisdictional WOTUS will be reduced. Therefore, impacts related to the proposed Project would be **Less than Significant with Mitigation**. The No-Build alternative would result in **No Impact**.

IMPACT BIO-4: Potential to 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.

Nesting Migratory Birds

During the February 10, 2023 survey, no nests were observed within the accessible areas of the BSA or on Waldo Road Bridge; however, two inactive nests were observed just outside of the BSA. In a previous biological resource evaluation, conducted on January 11, 2019 by Gallaway Enterprises personnel, there were avian nests observed within and on the existing Waldo Road Bridge. Cliff swallows (*Petrochelidon pyrrhonota*), barn swallows (*Hirundo rustica*), and black phoebes (*Sayornis nigricans*) commonly nest on the sides or pillars of bridges. These species make open and closed mud nests that are constructed of mud mixed with saliva and annual grasses. Nests are often reused every year during the breeding season and are reconstructed if damaged, eradicated, or occupied.

Nesting migratory birds protected under the MBTA are known to occur within the BSA based on observations during the biological resource evaluation. With the implementation of avoidance and minimization measures (**BIO-32** through **BIO-34**) there will be no direct impacts to migratory birds protected under the MBTA and CFGC. Impacts to nesting migratory birds would be **Less than Significant with Mitigation**. The No-Build alternative would result in **No Impact**.

California Central Valley Steelhead –DPS (O. mykiss pop.11) and Chinook salmon (O. tshawytscha)

California Central Valley steelhead (*O. mykiss pop.11)* have been identified in the upper reaches of Dry Creek. Dry Creek is considered Chinook salmon EFH under the MSA and is known to support a population of *O. tshawytscha pop.13*; therefore, there is potential for Chinook salmon to be present in the Project vicinity.

These species typically spawn from mid-December through May, peaking in mid-March, and egg incubation will occur from mid-December through July, both spawning and incubating dependent on the local environmental conditions within the natal tributary. In Dry Creek specifically, the ideal conditions for spawning and egg incubation based on the water quality data collected by USFWS and SSI would likely be from mid-December through mid-April. Average temperatures from mid-April through July would far exceed the 55 degrees Fahrenheit critical temperature for salmonid egg survival. Once the fry emerge, juvenile rearing within Dry Creek, specifically the action area where water depth is shallow likely resulting in above average water temperatures, likely occurs through mid-June before the average temperatures exceed the 68^0F critical temperature for salmonid survival. At this point, it is likely that *O. mykiss pop.11* juveniles would move downstream to larger tributaries where cooler water temperatures are more likely to be found. Adult *O. mykiss pop.11* migration typically begins in mid-July, where they enter the lower reaches of the Sacramento River basin, holding in larger tributaries with suitable water temperatures, until their natal tributaries (i.e. Dry Creek) fall within the necessary temperature thresholds for survival. Based on water quality data, adult *O. mykiss pop.11* could begin their migration up Dry Creek as early as October and hold in pools along the waterway until spawning in mid-December when temperatures are in the range for egg incubation.

O. mykiss pop.11 or Chinook salmon of any life stage would not be expected to occur within the BSA definitively from July through September, with the possibility of adult migration or juvenile emigration beginning in October, should the conditions be conducive to such movement. Project effects would include the removal of riparian vegetation along Dry Creek, added shade from the construction of a larger profile bridge, and increased turbidity during in-water work. **BIO-43** would restrict activities within the active channel of Dry Creek to the timeframe between July 1 and

October 31. **BIO-21** and **BO-44** through **BIO-48** would ensure overall water quality and safe passage of the fish through use of water diversion, biological monitoring, erosion control plan to avoid sediment runoff, restoration of the streambed to pre-construction conditions, and a spill prevention plan to prevent toxins from entering the waterway. Impacts to the movement of migratory fish would be **Less than Significant with Mitigation**. The No-Build alternative would result in **No Impact**.

IMPACT BIO-5: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The County has no ordinances explicitly protecting biological resources. Therefore, the proposed Project would result in **No Impact**. The No-Build alternative would result in **No Impact**.

IMPACT BIO-6: Potential to 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 habitat conservation plans or similar plans currently apply to the Project site. Both Yuba and Sutter Counties recently ended participation in a joint Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The Project site was not located within the proposed boundaries of the former plan and no conservation strategies have been proposed to date which would be in conflict with the Project. Therefore, the proposed Project would have **No Impact**. The No-Build alternative would result in **No Impact**.

Alternatives Summary

Build Alternative

Construction of the Build Alternative would result in impacts to special status species and migratory bird species. With implementation of the measures below, impacts would be reduced to less than significant levels.

No-Build Alternative

This alternative would not build a replacement bridge adjacent to the existing, structurally deficient bridge. No mitigation measures would be implemented.

3.3.5 Avoidance, Minimization, and/or Mitigation Measures

BIO-1: All trees associated with riparian and oak woodland habitat that are 4 inches diameter breast height (DBH) and larger will be mitigated for at a 3:1 ratio onsite. Should it be determined that onsite mitigation is infeasible, an offsite mitigation option or other approved methods would be considered during the permitting phase of the Project.

BIO-2: Immediately prior to the start of work, a qualified biologist shall conduct a survey to determine the presence or absence of northwestern pond turtles. If northwestern pond turtles are observed where they could be potentially impacted by Project activities, as determined by the on-site biologist, then work shall not be conducted within 100 feet of the sighting until the turtle(s) have left the Project site or a qualified biologist has relocated the turtle(s) immediately outside of the Project site.

BIO-3: If turtle eggs are uncovered during construction activities, then all work shall stop within a 25-foot radius of the nest and the qualified biologist should be notified immediately. The 25-foot buffer should be marked with identifiable markers that do not consist of fencing or materials that my block the migration of young turtles to the water or attract predators to the nest site. No work will be allowed within the 25-foot buffer until the turtle eggs have hatched or the nest fails.

BIO-4: All portions of the Project site that could result in inadvertently trapping turtles, such as open pits, trenches, and de-watered areas will be covered and/or exclusion fencing will be installed to prevent turtles from entering these areas.

BIO-5: Staging areas as well as fueling and maintenance activities shall be a minimum of 250 feet from riparian or aquatic habitats. The Project proponent shall prepare a spill prevention and clean-up plan.

BIO-6: The Project shall administer BMPs to protect water quality and control erosion.

BIO-7: All construction activities conducted in the riparian area along Dry Creek will be kept at a minimum to minimize vegetation removal and pruning.

BIO-8: All riparian habitat that is to be removed for the construction of the roadway realignment and new bridge will be mitigated for at a 3:1 ratio onsite. Should it be determined that onsite mitigation is infeasible, an offsite mitigation option or other approved methods would be considered during the permitting phase of the Project.

BIO-9: Two nighttime preconstruction surveys will be conducted during or immediately following separate precipitation events between October and May when ponded water is present.

BIO-10: Should any life stages of western spadefoot be found within the Project boundary, CDFW will be consulted prior to the initiation of Project activities to determine appropriate avoidance and minimization efforts.

BIO-11: A preconstruction survey shall be conducted within 14 days of the start of Project activities.

BIO-12: If there is a lapse between Project activities of more than 14 days, an additional survey shall be conducted within 24 hours prior to ground disturbance.

BIO-13: If a burrowing owl or its burrow is observed within the Project limits or within 500 feet of the Project limits, work will stop within 500 feet of the observation, and the GE Project Manager and the Resident Engineer shall be contacted.

BIO-14: Additionally, if a burrowing owl or its burrow is observed on site, the Contractor shall implement avoidance and minimization measures.

BIO-15: Begin construction activities outside of the avian breeding season (March 1 – August 31) to avoid potential impacts to nesting California black rails and deter California black rails from nesting within close proximity of the Project site.

BIO-16: If Project activities cannot begin outside of the avian breeding season (March 1 – August 31) then a California black rail survey will be conducted employing the protocol used in the Richmond *et al.* 2008 *Distribution of California Black Rails in the Sierra Nevada Foothills* to determine presence or absence of California black rails within the BSA. Survey(s) must include the following protocol measures:

- A qualified biologist, with working knowledge of California black rail protocol-level surveys, will conduct three California black rail surveys using the CDFW-approved Richmond *et al.* (2008) call playback survey protocol within suitable habitat areas in the BSA (i.e., Albion Creek and Vineyard Creek). Surveys will be conducted a minimum of 2 weeks apart OR a minimum of 1 week apart if construction is to begin within 7 days of the last survey.
- Avoid conducting surveys during environmental conditions that may affect the ability to hear or see California black rails (i.e., heavy rain, dense fog, winds > 20 mph).
- If California black rails are detected within or within close proximity of the BSA, then the County will be notified within two working days of the observation and will consult with CDFW for further guidance.
- If, for any reason, construction activities are stopped for 15 days or more within the avian breeding season, then one additional California black rail survey will be conducted prior to reinitiating construction activities.

BIO-17: During construction activities, all trash shall be removed from the worksite and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

BIO-18: All construction equipment shall stay within designated areas and within designated construction traffic routes to avoid any unnecessary vegetation and/or ground disturbances. When construction equipment or construction related vehicles are in route, they shall remain at a low speed limit to minimize dust.

BIO-19: There shall be no staging of construction equipment outside of the Project Boundary.

BIO-20: All construction personnel shall remain in the limits of the Project Boundary and will avoid wetland areas around Albion Creek and Vineyard Creek.

BIO-21: All fueling and/or equipment maintenance shall occur 250 feet from all water bodies and riparian areas, except for pile drivers or other stationary equipment, and a spill prevention plan (SPP) will be created and implemented if a spill or equipment leak occurs during construction activities. Any spill within the active channel of Dry Creek will be reported to NMFS, CDFW and other appropriate resource agencies within 24 hours. Spill prevention measures will include stockpiling absorbent booms, staging hazardous materials at least 25 feet away from the river, and maintaining and checking construction equipment to prevent fuel and lubrication leaks. SWPPP measures will utilize applicable BMPs such as use of silt fences, straw bales, other methods necessary to minimize storm water discharge associated with construction activities.

BIO-22: Begin construction activities prior to the avian breeding season (March 1 – August 31) to avoid potential impacts to nesting Swainson's hawk and to deter Swainson's hawks from nesting within a quarter-mile of the Project Boundary.

BIO-23: If Project activities cannot begin prior to the avian breeding season (March 1 – August 31), then a Swainson's hawk pre-construction survey will be conducted to determine presence or absence of nesting Swainson's hawks within a quarter-mile of the Project Boundary. A pre-construction survey will be conducted within 7 days prior to ground disturbing activities. Survey(s) must include the following protocol measures:

- Conduct a Swainson's hawk pre-construction survey 7 days prior to construction activities within a quarter-mile radius of the Project Boundary.

- If a Swainson's hawk nest is observed within a quarter-mile radius of the Project Boundary, the County will be notified and will then consult with CDFW for further guidance.
- If construction activities stop for 15 days or longer, another Swainson's hawk survey will be conducted within 7 days prior to the continuation of construction activities.

BIO-24: Project activities, including site grubbing and vegetation removal, within the BSA shall be initiated outside of the bird nesting season (March 1 – August 31).

BIO-25: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
- If an active tricolored blackbird nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.

BIO-26: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
- If an active grasshopper sparrow nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.

BIO-27: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
- If an active long-eared owl nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.

BIO-28: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
- If an active northern harrier nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.

BIO-29: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
- If an active Modesto population song sparrow nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the preconstruction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.

BIO-30: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
- If an active yellow warbler nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.

BIO-31: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur:

- A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
- If an active yellow-breasted chat nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be

prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.

BIO-32: Any vegetation removal, ground disturbances, and removal actions to the existing Waldo Road Bridge should be conducted prior to the avian breeding season (March 1 – August 31).

BIO-33: If the construction of the new bridge and roadway realignment will occur during the avian breeding season (March 1 – August 31), prior to the start of construction, a migratory bird and raptor survey will be conducted by a qualified biologist to identify any active nests within 200 feet of the Project Boundary. A qualified biologist shall:

- Conduct a survey for all birds protected by the MBTA and CFGC within 7 days prior to the initiation of construction activities and map all nests located within 200 feet of the Project Boundary;
- Develop buffer zones around active nests as recommended by a qualified biologist. Construction activities shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored at least twice per week to determine nesting status.
- If construction activities stop for 15 days or longer, then another migratory bird and raptor survey shall be conducted within 7 days prior to the continuation of construction activities.

BIO-34: If removal of the existing Waldo Road Bridge will occur during the avian breeding season (March 1 – August 31), then exclusion and monitoring activities will be implemented to exclude all avian nests from the existing Waldo Road Bridge. Exclusion and monitoring activities include the following:

Exclusion

- All inactive avian nests should be removed from the bridge by a qualified biologist prior to March 1 to deter avian species from nesting on the bridge.
- If exclusionary devices are necessary to prevent avian species from nesting on the existing bridge, then exclusion devices shall be installed prior to March 1 under the supervision of a qualified biologist. Exclusionary devices are to be maintained and monitored by a qualified biologist until the removal of the existing bridge has been initiated.

An exclusion plan shall be created by a qualified biologist and a report sent to the County and CDFW for approval.

Monitoring

- Weekly or as necessary monitoring, or additional exclusion activities, will be conducted by a qualified biologist on the existing bridge after March 1 until all bridge removal activities are complete or the end of the avian breeding season (August 31).

BIO-35: Demolition activities and vegetation removal should begin prior to the maternity season or non-volant period (April 1 – August 31), when young bats are present but are unable to fly. If demolition does take place prior to the non-volant period, then a qualified biologist should be onsite during demolition activities to monitor for the presence of winter roosting bats.

BIO-36: If demolition activities and vegetation removal cannot begin prior to the non-volant period than exclusion and monitoring activities will be implemented prior to demolition activities Exclusion and monitoring activities will include the following.

Exclusion

- Exclusion devices will be installed prior to the non-volant period (April 1 – August 31). Exclusion devices shall be maintained throughout the duration of bridge removal activities and removed after construction activities are complete.
- An exclusion plan shall be created by a qualified biologist and a report sent to the County and CDFW for approval.

Monitoring

- Weekly or as necessary monitoring, or additional exclusion activities, will be conducted on the existing Waldo Road Bridge by a qualified biologist after excluding bats until bridge removal activities are complete or until the end of the non-volant period (August 31).

BIO-37: If bridge removal activities are conducted prior to the non-volant period and construction activities for the new bridge cannot begin prior to the non-volant period (April 1 – August 31), then a qualified biologist will conduct a pre-construction bat exit survey no more than seven days prior to the start of construction activities to determine if bats are utilizing Waldo Road Bridge. If bats are observed roosting within Waldo Road Bridge, then the following avoidance and minimization measures shall be implemented.

- Workers and vehicle disturbance shall not be allowed under the existing Waldo Road Bridge.
- Construction equipment shall not be parked under the Bridge.
- High beam lights shall not be used at any time under the existing bridge.

BIO-38: A pre-construction survey for roosting western red bats will be conducted by a qualified biologist within 7 days prior to the start of construction activities to determine presence or absence of roosting western red bats within the BSA.

BIO-39: If roosting western red bats are observed within the BSA, the County will be notified within 2 working days of the observation. Additional avoidance and minimization measures may be implemented under the guidance of the biologist.

BIO-40: All riparian trees that are to be removed for the construction of the roadway realignment and new bridge shall be mitigated for at a 3:1 ratio onsite. Should it be determined that onsite mitigation is infeasible, an offsite mitigation option or other approved methods would be considered during the permitting phase of the Project.

BIO-41: Mitigation for impacts to jurisdictional WOTUS will be addressed through the purchase of credits at a Corps-approved mitigation bank or payment to a Corps approved in-lieu fund as determined appropriate by the regulatory agencies.

BIO-42: It is recommended that general BMPs be implemented prior to and during construction activities, as recommended under the Cal-IPC's Preventing the Spread of Invasive Plants: Best Management Practices for Transportation and Utility Corridors (2012). The following are the recommended general BMPs under Cal-IPC:

- Schedule activities to minimize potential for introduction and spread of invasive plants.
- Designate specific areas for cleaning tools, vehicles, equipment, clothing and gear.
- Designate waste disposal areas for invasive plant materials and contain invasive plant material during transport.
- Plan travel routes to avoid areas infested with invasive plants.
- Clean tools, equipment, and vehicles before transporting materials and before entering and leaving worksites.
- Clean clothing, footwear, and gear before leaving infested areas.
- Prepare worksites to limit the introduction and spread of invasive plants.
- Minimize soil and vegetation disturbance.

BIO-43: Activities conducted in the active channel of Dry Creek will be limited to the timeframe between July 1 and October 31, outside of the window for adult O. mykiss pop.11 migration and spawning, egg incubation, and fry emergence.

BIO-44: A silt screen will be installed prior to and remain intact and functional during all in-water construction to prevent sediment drift. Silt screens must not inhibit the upstream or downstream movement of aquatic wildlife.

BIO-45: Disturbance within Dry Creek will be kept to a minimum during construction activities and will only occur within designated areas.

BIO-46: If a water diversion will be utilized in Dry Creek it must be in place between July 1 and October 31. The clear water diversion must not inhibit the upstream or downstream movement of aquatic wildlife. A biological monitor will be on-site prior to and during the installation and removal of the water diversion. The qualified biologist must possess a vast knowledge on salmonid life history. No fish relocations will occur.

BIO-47: An erosion control plan (ECP) that incorporates erosion BMPs shall be created and implemented prior to the wet season (October 15 – April 1) to avoid sediment runoff from entering waters of the U.S. Applicable BMPs will include permanent and temporary erosion control measures, such as straw bales, mulch or wattles, silt fencing, filter fabric, spill remediation material such as absorbent booms, and/or a native fast growing seed mix as prescribed in the ECP and stormwater pollution prevention plan (SWPPP). BMPs shall be implemented that are necessary to minimize the risk of sedimentation, turbidity, and hazardous material spills.

BIO-48: Portions of the streambed of Dry Creek disturbed by construction activities will be restored to a pre-construction condition to the greatest extent practicable.

BIO-49: Through the development and implementation of a Riparian Restoration Plan the banks of Dry Creek and all upland areas will be revegetated and seeded using a native plant and seed mix at the end of the construction. The plan will be required to be submitted to NMFS for review and approval and will include measures such as a watering and monitoring schedule, reporting and corrective action conditions.

3.13 TRIBAL CULTURAL RESOURCES

3.13.1 Regulatory Setting

State Laws and Requirements

Public Resources Code Section 21084.2

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American Tribes and consideration of Tribal Cultural Resources (TCRs). These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and Project proponents would have information available, early in the Project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a "Project with an effect that may cause a substantial adverse change in the significance of a TCR is a Project that may have a significant effect on the environment" (PRC § 21084.2).

To help determine whether a Project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American Tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed Project. The consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a Project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the Tribes that have requested notification or proposed Projects within their traditionally and culturally affiliated area. CEQA also stipulates that the Native American Heritage Commission shall assist the lead agency in identifying the California Native American Tribes that are traditionally and culturally affiliated within the Project area. If a Tribe wishes to engage in consultation on the Project, the Tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the Tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a Project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact.

Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an cultural site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term "tribal cultural resource" refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California PRC Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

Local Laws and Requirements

Yuba County General Plan

The Yuba County General Plan Chapter 7 – Natural Resource Element, contains goals, objectives, and policies related to Cultural Resources.

- Goal NR6. Cultural Resources: *Identify, protect, and preserve Yuba County's important Indigenous and historic resources.*

3.13.2 Environmental Setting and Existing Conditions

The Project area is located on the eastern side of the Sacramento River Valley, west of the Sierra Foothills in Yuba County. Elevation in the Project area ranges from 250 ft. to 272 ft. above mean sea level. This area is characterized by undulating hills interspersed with tributaries of the Yuba River. Dry Creek is one of these drainages and bisects the Project area. The creek flows west through the historic period town of Spenceville, the Project area, Beale Lake, and eventually empties into the Bear River in Rio Oso. Per Yuba County's General Plan Figure NR-6, Dry Creek is considered an area of high sensitivity for the presence of indigenous resources.

Cultural resources investigations for this Project occurred in 2012, 2013, and 2022 and included pedestrian surveys, Extended Phase I presence/absence subsurface testing, and Phase II evaluation testing. The APE for the Project was established in consultation with William Larson, Caltrans PQS Principal Investigator, Indigenous Archaeology, and Vlad Popko, District Local Assistance Engineer, on June 23, 2023 (**Figure 7**). The horizontal APE was established as the area of direct and indirect effects and consists of an approximately 14-acre area; however, the area of direct effects, which includes all staging areas, construction vehicular and equipment access, vegetation/tree removal, approach roadway realignment, bridge demolition, new bridge construction, water diversions, right-of-way acquisition, and grading activities required to remove the existing Waldo Road over Dry Creek Bridge (Bridge No. 16C0006) consists of an approximately 5.5-acre area. Potential staging areas are the existing roadway, the proposed new roadway alignment, and areas at the north and south ends of the project site east of the new roadway alignment.

The vertical APE consists of a maximum of 20 feet of depth from the existing ground surface to below ground surface (bgs) to accommodate earthwork for the construction of bridge abutments. The minimum depth of ground disturbance is approximately 5 feet bgs, required for all roadway approach realignment work, vegetation removal, and fill compaction. The Project does not involve relocation of any buried utilities.

Native American Outreach

A letter requesting a search of the Sacred Lands File and a list of Native American individuals and organizations that may have knowledge of, or concerns regarding, cultural resources in the Project area was sent to the Native American Heritage Commission. The search of the Sacred Lands File did not identify any known sacred lands or cultural resources in the "immediate project area".

In 2012, project notification letters were sent to all potentially interested parties identified by the Native American Heritage Commission. An additional round of project notification letters were sent in 2017 notifying the recipients that archaeological excavations would occur within the APE. Letter recipients included the following:

- Colfax-Todds Valley Consolidated Tribe

- Enterprise Rancheria of Maidu Indians
- Mooretown Rancheria of Maidu Indians
- Strawberry Valley Rancheria
- Tsi-Akim Maidu
- United Auburn Indian Community

The Enterprise Rancheria of Maidu Indians responded to the 2021 outreach attempt and requested that a cultural monitor be present during any archaeological excavation. No response was received by the Enterprise Rancheria of Maidu Indians regarding the 2017 letter which communicated that archaeological excavations were going to occur.

One response was received by the United Auburn Indian Community (UAIC). The UAIC is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan) Tribal members who are traditionally and culturally affiliated with the project area. The Tribe has a deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the Tribe's goal to ensure the preservation and continuance of their cultural heritage for current and future generations.

In 2017, the UAIC requested a site visit. During the site visit, the UAIC requested that no destructive analyses, such as obsidian hydration, be conducted on Native American artifacts recovered during the archaeological excavation. The UAIC also requested that a UAIC monitor be present during all archaeological excavations and that all discovered artifacts and features be reburied rather than submitted to a curation facility for permanent curation. As requested, a UAIC monitor was present during archaeological excavations and no destructive testing, such as hydration analyses, was conducted. All collected artifacts were provided to the UAIC and are currently awaiting reburial pending the completion of construction activities and identification of a reburial location, to be determined in consultation with the County and the UAIC.

Project update letters were also sent in 2023 to inform the recipients that demolition of the existing bridge was included as a component of the Project and that additional survey of the demolition area would occur. The update letter also relayed the results of the previous archaeological investigations. The Mooretown Rancheria and the UAIC were the only respondents. The Mooretown Rancheria stated that they did not have any information regarding known resources to share but requested to be notified if new information becomes available or if late discoveries are identified.

The UAIC requested copies of all available cultural reports and a history of previous consultation. After review of the reports and consultation history, the UAIC noted that the Project would impact Tribal Cultural Resource (Cultural Site CA-YUB-1924/H). The UAIC provided recommendations regarding minimization measures and protocols to be implemented should Native American cultural resources be discovered during construction of the Project. Minimization measures and protocols included retaining a compensated Native American monitor to be present during ground disturbing activities; halting work within a 100-foot radius if Native American resources are discovered to assess significance and treatment by the UAIC; reburial of discovered artifacts within a location that will be protected from future ground disturbing activities; and compensation for all services provided by the UAIC. The County will continue coordinating with the UAIC to develop a TCR Protocol Plan (measure **TCR-2**) which will be implemented during construction.

Background Research

A search of survey reports, site records, historic maps and other pertinent data on file at the North Central Information Center within the APE and a quarter-mile search radius was obtained. The

search results indicated that one cultural resource was located beyond the APE but within the search radius. The record search also identified Waldo Bridge, BR# 16C0006, as a recorded historic-era bridge that was also previously determined as eligible for listing on the National Register of Historic Places. Subsequent review of the bridge also determined it was eligible for listing on the California Register of Historical Resources. This qualifies the bridge as both a historic property, under Section 106 of the National Historic Preservation Act, and a historical resource, under CEQA.

Methods

The UAIC conducted background search for the identification of Tribal Cultural Resources for this project, which included a review of pertinent literature, historic maps, and a records search using UAIC's Tribal Historic Information System (THRIS). UAIC's THRIS database is composed of UAIC's areas of oral history, ethnographic history, and places of cultural and religious significance, including UAIC Sacred Lands that are submitted to the Native American Heritage Commission (NAHC). The THRIS resources shown in this region also include previously recorded indigenous resources identified through the California Historic Resources Information System Center (CHRIS) as well as historic resources and survey data.

Field Methods

Pedestrian surveys of the APE took place in 2012 and 2013 by Peak and Associates archaeological staff and Caltrans archaeological staff and again in 2022 by Dokken Engineering archaeological staff. During these surveys, both the ground surface and exposed subsurface cuts, such as the cut banks within Dry Creek, as well as roadway cuts, and animal burrows were examined for indications of surface or subsurface cultural resources, soil color change, and/or staining that could indicate past human activity or buried deposits. Two cultural resources were identified: the existing historic-era Waldo Road Bridge and one cultural site, CA-YUB-1924/H, exhibiting use during both indigenous and historic occupation periods. A Phase II evaluation, which included both archaeological excavation, laboratory analyses, and research efforts, was conducted to determine whether the site was eligible for listing on the National Register of Historic Places and/or the California Register of Historical Resources. The results of the significance assessment for the cultural site are discussed below. For discussion on the historic-era Waldo Bridge and the historic-component of CA-YUB-1924/H, please see Chapter 3.4 Cultural Resources in the Original Draft EIR.

Identified Tribal Cultural Resource: CA-YUB-1924/H

One TCR was identified within the APE, CA-YUB-1924/H, which includes both indigenous-era and historic-era components. The indigenous component contained a sparse artifact assemblage with few functionally and temporally diagnostic lithic tool materials. Two historic-period assemblages were also present. One is associated with the Cabbage Patch townsite, which was located on level terrain both north and south of Dry Creek. Cabbage Patch included one of the earliest known African American settlements, which appears to have begun with a cabbage patch agricultural business. The area later grew to develop a small townsite during the California Gold Rush years with hotel, blacksmith shop, and other businesses and residences catering to several nearby large mining areas and ephemeral mining camps. None of these structures were identified within the APE. There may have also been placer mining in the immediate vicinity of the townsite, although no evidence of such activities were identified within the APE. The townsite also contained the Cabbage Patch cemetery, located beyond the APE. The second historic period assemblage appears associated with the development of a Sacramento spur of the Bay Counties Power Company pole line that was built from Colgate to Sacramento through Cabbage Patch between 1895 and 1901. While the historical records do not document the presence of Native

Americans within the Cabbage Patch settlement or nearby Spencerville townsite, historical documentation of Native American presence is unreliable.

Archaeological excavations revealed that the portion of the site within the APE exhibits evidence of previous ground disturbance activities which have damaged and likely redeposited both the Native American and historic assemblages from their original depositional locations. Based on the paucity of artifacts, seemingly redeposited surface materials, and lack of buried cultural material typical of sustained human occupation, it is believed that the APE is located on the peripheral edge of a Native American and historic-era occupation area that extends beyond the APE onto private property. Based on the artifacts and presence of nearby food processing features located along Dry Creek, the Project vicinity was used by Native Americans for food procurement and processing; however, it is very likely that the Project vicinity was used for a plethora of indigenous people's purposes, including habitation, travel, and spiritual ceremonies.

Cultural Components and Character Defining Features

As the full boundary of the site extends beyond the APE onto private property, its complete limits, associated archaeological features, and artifacts could not be identified; however, TCRs contain more than archaeological features and artifacts. The site's natural components comprise both its overall setting and include resources that would have been utilized or integrated into daily life. While there may not be any plant or wildlife that have survived since the original Native American occupation of this area, the existing the plant and wildlife species can be assessed to determine if the current conditions represent pre 1800s/European settlement conditions.

The natural components consist of Dry Creek, Vineyard Creek, Albion Creek, Cox Creek, oak woodland, riparian vegetation, rolling terrain of the foothills, bedrock outcrops, and the California native wildlife species utilizing these habitats. The oak woodlands and riparian vegetation are unlikely to have varied significantly between modern conditions and pre-European settlement of the area, with the majority of the alterations most likely resulting in thinning the vegetation, as opposed to eradication. Existing vegetation includes blue oak woodland, valley foothill riparian, annual grassland, and wetlands. Blue oaks make up the majority of the tree species composition within the APE and the understory is comprised of sparsely scattered shrubs and annual grass species. Species found in association with blue oak woodlands within the Project vicinity include California coffeeberry (*Rhamnus californica*), poison oak (*Toxicodendron diversilobum*), and a variety of annual grassland species. Common species found in the annual grasslands include rose clover (*Trifolium hirtum*), rip-gut brome (*Bromus diandrus*) wild oat (*Avena sp*.), soft chess (*Bromus hordeaceus*), and red brome (*Bromus madritensis ssp. rubens*). Invasive species such as yellow star-thistle (*Centaurea solstitialis*), medusahead grass (*Taeniatherum caputmedusae*), and Italian thistle (*Carduus pycnocephalus*) were also observed within the annual grasslands and were likely introduced to the area after the 1850s.

Valley foothill riparian habitat occurs on both sides of Dry Creek. This habitat is associated with Dry Creek and its seasonal flooding. Species found in association with valley foothill riparian habitat within the Project vicinity include Fremont cottonwood (Populus fremontii), valley oak, California black walnut (Juglans californica), Oregon ash (Fraxnus latifolia), black willow (Salix goodingii), arroyo willow (Salix lasiolepis), narrowleaf willow (Salix exigua), California wild rose (Rosa californica), and Himalayan blackberry (Rubus armeniacus). While Himalyan blackberry is invasive, it is very likely that native blackberries would have been present prior to being displaced/outcompeted.

Seasonal wetlands that are associated with Albion Creek and Vineyard Creek occur along the fringes of their ordinary high water marks. Riparian wetlands occur along Dry Creek where soils are less permeable. These wetlands occur in areas, primarily along the north banks of Dry Creek.

The waterways and various flora offer habitat for a variety of wildlife species. Some of the species that were observed included acorn woodpecker (*Melanerpes formicivorus*), Anna's hummingbird (*Calypte anna*), Lewis's woodpecker (*Melanerpes lewis*), and western fence lizard (*Sceloporus occidentalis*). Additionally, according to Mayer and Laudenslayer's A Guide to Wildlife Habitats of California (1988), valley foothill riparian habitat functions as wildlife migration and dispersal corridors, escapement and nesting areas and provides food, shelter and water for a variety of species of resident and migrating wildlife species. Wildlife species use grassland habitat for foraging, but require some other habitat characteristic such as rocky out crops, cliffs, caves or ponds in order to find shelter and cover for escapement. This type of cover is present due to bedrock outcrops throughout the Project vicinity. Species observed within the annual grasslands included American goldfinch (*Spinus tristis*), lesser goldfinch (*Spinus psaltria*), California quail (*Callipepla californica*), and killdeer (*Charadrius vociferus*). Additionally, snorkel and eDNA surveys conducted after removal of the Beale Lake Dam, located downstream of the Project, identified the presence of California Central Valley steelhead while historically, it is known that Chinook salmon also utilized Dry Creek. Chinook salmon Essential Fish Habitat is also present in the vicinity of the Project. These fish species would have been highly sought and important resources for Native Americans.

The variety of existing plant and wildlife species would have also been present during indigenous occupation of the area and may have included a greater species variety in larger populations. While the blue oak woodland, valley foothill riparian, annual grassland, waterways, wetlands, rock outcrops, and associated animal species comprise the resource's overall setting and feel, the plant and wildlife species also would have provided numerous daily resources. The creeks would have provided reliable fresh water for drinking and food processing, as well as fish, frogs, turtles, and waterfowl which would have been utilized for food. The rock outcrops were likely utilized for food grinding and other plant and wildlife processing, but may have also acted as blinds for both small and large animal hunting. The woodlands would have provided acorns, a staple food in the foothills, as well as other staples including clovers, walnuts, wild oat, rose hips, and blackberries. Vegetation present in the Project vicinity would have also been utilized for shelter, clothing, adornment, and medicinal purposes. Coffeeberry could have been used as a poison oak remedy; cottonwoods could have been used for structures, poultices, arrow shafts, and clothing; and willows and some annual grasses would have been used for basketry, clothing, and arrow shafts.

While the plant and wildlife species may have been more dense or more varied during Native American occupation of the Project vicinity, the existing species are a continuation of a landscape present during Native American population and represent pre-1800s/European settlement conditions. For these reasons, the Dry Creek, Vineyard Creek, Albion Creek, Cox Creek, oak woodland, riparian vegetation, rolling terrain of the foothills, bedrock outcrops, and the California native wildlife species utilizing these habitats constitute character defining components of the Native American occupation era of TCR CA-YUB-1924/H. Additional character defining components of the site include lithic artifacts, representing tool creation, identified during archaeological excavations within the APE.

Significance Assessment

As previously noted, the entire cultural site boundaries could not be defined as the site extends beyond the APE into private property. As the full boundary and all associated features, artifacts, and natural components could not be identified, *formal* assessment of the site's significance cannot be completed at this time. However, for the purpose of both CEQA and Section 106 of the National Historic Preservation analysis, the site is being assumed eligible for listing on both the National Register of Historic Places and the California Register of Historical Resources, for the

purposes of this Project only, under the National Register of Historic Places/California Register of Historical Resources Criteria A/1 and D/4 for associations with important events in our history as well as containing information that has yielded, or has the potential to yield, information important to understanding the history of both this area and of California. Any future projects which occur within the suspected boundary of the cultural site will be required to document whether additional artifacts and features are present, assess site's significance, and determine any potential impacts.

As the cultural site is being assumed eligible for both the National Register of Historic Places and the California Register of Historical Resources, for the purposes of this Project only, the site is considered a historic property, as defined under Section 106 of the National Historic Preservation Act; a historical resource as defined under CEQA §15064.5; and as a Tribal Cultural Resource, as defined under CEQA §21074. As such, potential Project impacts to this resource must be assessed to determine if mitigation is required. Potential impacts are discussed below.

3.13.3 Thresholds of Significance

Would the Project:

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

3.13.4 Environmental Impacts

IMPACT TCR-1: Potential to cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.?

TCR CA-YUB-1924/H includes evidence of occupations during both Native American and historic-era periods. It was evaluated as part of this Project and determined eligible for inclusion in the National Register of Historic Places and California Register of Historical Resources, for the purposes of this Project only. The character defining features of the Native American occupation

of the area consist of the natural components and overall setting which consist of Dry Creek, Vineyard Creek, Albion Creek, Cox Creek, riparian vegetation, rolling terrain of the foothills, bedrock outcrops and the California native wildlife species utilizing these habitats. While the plant and wildlife species may have been more dense or more varied during Native American occupation of the Project vicinity, the existing species are a continuation of a landscape present during Native American population and represent pre-1800s/European settlement conditions. Additional character defining components of the site include lithic artifacts, representing tool creation and processing.

Project impacts to the character defining features of the Native American occupation of CA-YUB-1924/H include construction of the new bridge and demolition of the existing bridge. Construction and demolition activities will involve removal of vegetation, including trees and understory shrubs that constitute the oak woodland and riparian habitats; however, after demolition and construction activities, the area will be revegetated with California native vegetation, as part of mitigation measure **TCR-4**. This will restore biological habitat to the area, especially within the area of the demolished bridge. While construction of the new bridge at the upstream location will introduce a new modern visual component, the overall setting of the area – which consists of Dry Creek, Vineyard Creek, Albion Creek, Cox Creek, oak woodland, riparian vegetation, rolling terrain of the foothills, and bedrock outcrops - will still remain in abundance and offer a strong connection to the pre-1800s setting. Further, the overall health of the biological habitats which comprise the setting of the TCR, including wildlife species and water quality, will also be protected from anticipated impacts through implementation of measures **BIO-1** through **BIO-49.**

Additionally, as the results of the archaeological excavation noted that the APE is located on the periphery of the larger cultural site, demolition and construction activities are not anticipated to impact subsurface Native American artifact deposits/concentrations. If any such subsurface deposits are found or if sparsely scattered surface artifacts are encountered during construction, mitigation measures **TCR-1** through **TCR-3** will ensure that discovered resources will be assessed and properly treated to avoid destruction. Further, **TCR-3** will also ensure that previously collected artifacts, which are currently in possession of the UAIC, will be reburied in a protected location. For these reasons, the proposed Project is not anticipated to cause a substantial adverse change in the significance of TCR CA-YUB-1924/H. Therefore, implementation of **TCR-1** through **TCR-3** will reduce the Project's impacts to **Less than Significant Impact with Mitigation.**

Alternatives Summary

Build Alternative

While the Build Alternative would involve removal of oak woodland and riparian vegetation, which are considered character defining features of TCR CA-YUB-1924/H, the overall setting of the resource – which consists of Dry Creek, Vineyard Creek, Albion Creek, Cox Creek, oak woodland, riparian vegetation, rolling terrain of the foothills, and bedrock outcrops – will still remain in abundance and retain a strong connection to the pre-1800s setting. It is also worth noting that the existing setting currently includes a modern visual intrusion, the existing bridge/roadway, which is an alteration to the indigenous setting. Replacing the existing bridge/roadway and with a new bridge/roadway on a parallel alignment would not result in additional modern visual alterations to the site, beyond vegetation removal. Implementation of measure **TCR-4** will ensure that California native vegetation is replanted/hydroseeded after construction activities are complete. Implementation of measures **BIO-1** through **BIO-49** will minimize impacts to biological habitat and wildlife species. Finally, implementation of measures **TCR-1** through **TCR-3** will ensure that any TCR components identified during construction will be assessed and properly treated to avoid destruction. Therefore, anticipated Project impacts to TCR CA-YUB-1924/H will **be Less than Significant with Mitigation Incorporated**.

No-Build Alternative

This alternative would not build a replacement bridge adjacent to the existing, structurally deficient bridge. No vegetation removal would occur and the overall setting of TCR CA-YUB-1924/H would not be impacted. No mitigation measures would be implemented.

3.13.5 Avoidance, Minimization, and/or Mitigation Measures

TCR-1: The County shall contact the UAIC at least 2 weeks prior to project ground-disturbing activities to retain the services of a UAIC certified Tribal Monitor. The duration of the construction schedule and Tribal Monitoring shall be determined at this time. A contracted Tribal Monitor(s) shall monitor the vegetation grubbing, stripping, grading, trenching, and other agreed-upon ground-disturbing activities in the project area. The Tribal Monitor, in consultation with the UAIC Tribal Historic Preservation Officer (THPO) and the County shall determine an end or reduction to the on-site monitoring if/when construction activities have a low potential for impacting Tribal Cultural Resources.

Tribal Monitors or Tribal Representatives shall have the authority to direct that work be temporarily paused, diverted, or slowed within 100 feet of the immediate impact area if sites or objects of potential significance are identified. The temporary pause/diversion shall be of an adequate duration for the Tribal Representative to examine the resource. Once a potential discovery has been identified, the TCR Discovery Protocol (TCR-2) shall be implemented and followed.

The County shall assist with resolution of disagreements between the Construction Contractor and the UAIC, if disagreements occur on the project.

It is the responsibility of the Tribal Monitor(s) to wear the appropriate safety equipment while on the construction site and adhere to construction safety procedures and protocols. To track the implementation of this measure, the Tribal Monitor(s) shall document field-monitoring activities on a Tribal Monitor log.

TCR-2: The County, in consultation with the UAIC, shall develop a TCR Discovery Protocol to be implemented during construction of the Project. The TCR Discovery Protocol will outline how the County and the UAIC will coordinate regarding Native American cultural resources discovered during construction, how those discoveries will be assessed and treated, and how human remains will be treated if discovered and if the UAIC is identified by the Native American Commission as the Most Likely Descendent. The TCR Discovery Protocol will be finalized prior to the start of construction and will be supplied to the Resident Engineer and Construction Manager. At no time, regardless of the presence or absence of a tribal monitor, shall suspected TCRs be mishandled or disrespected.

Discussion of appropriate treatment of TCRs in the TCR Discovery Protocol may include but should not be limited to:

- Recordation of the resource(s)
- Avoidance and preservation of the resource(s)
- Reburial of the resource(s) onsite in a designated area subject to no future disturbance (as specified in TCR-3). The location of the reburial shall be acceptable to the UAIC.

TCR-3: The County, in consultation with the UAIC, will designate an area for the reburial of all collected Native American cultural resources, including those collected as part of previous archaeological investigations and any discovered during construction activities that will be protected for all future ground disturbance either through a deed restriction or in perpetuity-marker designating the protected area. The County will also coordinate with the UAIC regarding compensation for reburial services.

TCR-4: All disturbed areas would be restored to pre-construction contours and revegetated, through hydroseeding or other means. If hydroseed and plant mixes are used during or post-construction, plant species must consist of a biologist approved plant palate seed mix of native species sourced locally to the Project area.

Please see 3.3 Biological Resources for **BIO-1** through **BIO-49.**

3.16 MANDATORY FINDINGS OF SIGNIFICANCE

3.16.1 Thresholds of Significance

Would the project:

a) *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

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

3.16.2 Environmental Impacts

Impact MAN-1: The Project does have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

Operation of the completed Project would not have potential to degrade the quality of the environment or threaten wildlife or plant communities. However, temporary, short-term construction of the Project would have the potential to degrade the quality of the existing environment. The Project has the potential to impact wildlife species identified in Chapter 3.3 Biological Resources. Of particular note is the presence of California Central Valley steelhead – DPS (*O. mykiss pop.11*) and Chinook salmon EFH; however, mitigation measures **BIO-1** through **BIO-49** would reduce the level of Project-related impacts to the species and habitat to less than significant levels.

While the Project would involve removal of oak woodland and riparian vegetation, which are considered character defining features of TCR CA-YUB-1924/H, the overall setting of the resource – which consists of Dry Creek, Vineyard Creek, Albion Creek, Cox Creek, oak woodland, riparian vegetation, rolling terrain of the foothills, and bedrock outcrops – will still remain in abundance and retain a strong connection to the pre-1800s setting. Implementation of measure **TCR-4** will ensure that California native vegetation is replanted/hydroseeded after construction activities are complete. Implementation of measures **BIO-1** through **BIO-49** will minimize impacts to biological habitat and wildlife species, including California Central Valley steelhead and Chinook salmon. Finally, implementation of measures **TCR-1** through **TCR-3** will ensure that any TCR components identified during construction will be assessed and properly treated to avoid destruction.

As the Waldo Road Bridge is considered a historical resource under CEQA, and therefore eligible for the California Register of Historical Resources, demolition of the bridge constitutes a

significant effect to the environment, per CEQA guidelines 15064.5(b). To reduce the significant effects, the Project will implement measures **CUL-1a** through **CUL-1c**, which consists of measures included in the Caltrans and SHPO approved MOA and the Archaeological Monitoring Plan/Environmentally Sensitive Action Plan. While measures **CUL-1a** through **CUL-1c** will reduce the impact to the existing historic bridge, it will not mitigate the impact to a less than significant level; therefore, impacts would remain **Significant and Unavoidable**.

IMPACT MAN-2: The Project does not have impacts that are individually limited, but cumulatively considerable.

The Project consists of replacing the existing bridge for safety purposes. There are no other planned projects in the vicinity that would contribute to cumulative impacts to environmental resources. There is no significant connection between the Project, and any past, current, or future projects. With the exception of the demolition of the existing Waldo Road Bridge, all potential significant impacts would be addressed with avoidance, minimization, and mitigation measures and would not result in cumulatively considerable impacts. Although demolition to the existing Waldo Road Bridge is a significant and unavoidable impact, it does not constitute a cumulative impact since the Project would have no potential to directly or indirectly impact other historic structures in the region. Impacts related to the proposed Project would be **Less than Significant with Mitigation**.

IMPACT MAN-3: The Project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

Due to the nature and size of the proposed Project, no substantial adverse effects on humans are expected. The Project would not emit substantial amounts of air pollutants, would not expose residents to flooding. The two potential human health effects identified as a result of Project implementation were minor construction-related impacts which include dust that could affect the few scattered residences near the Project site and the possible presence of MEC within the Project area. Impacts would be **Less than Significant with Mitigation** with implementation of **AQ-1**, **AQ-2**, and **HAZ-1**.

3.16.3 Avoidance, Minimization, and/or Mitigation Measures

Mitigation measures under analysis of each environmental resource within this EIR would reduce impacts for the proposed Project to less than significant:

- Measures AQ-1 through AQ-4 (Air Quality)
- Measures BIO-1 through BIO-49 (Biological Resources and Tribal Cultural Resources)
- Measures CUL-1(a-c) and CUL-2(a-i) (Cultural Resources)
- Measures HAZ-1 through HAZ-4 (Hazards and Hazardous Materials)
- Measures WQ-1 (Hydrology and Water Quality)
- Measure NOI-1 (Noise)
- Measures TCR-1 through TCR-4 (Tribal Cultural Resources)

The list of measures is also within **Table 11**: Mitigation Monitoring and Reporting Program.

5 CEQA EVALUATION AND CONSIDERATIONS

5.5 MITIGATION MEASURES

Section 15126.4(a)(1) of the 2021 CEQA Guidelines states, “An EIR shall describe feasible measures which could minimize significant adverse impacts, including where relevant, inefficient and unnecessary consumption of energy.” This section provides details on mitigation measures applied to different resources and the enforcement of measures through permit conditions, agreement, or other legally binding instruments.

Section 15126.4(a)(1)(D) provides that, “If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the Project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the Project as proposed.” For each impact considered significant in this EIR, mitigation measures have been designed that would reduce the severity of the impact.

Mitigation to reduce the significant impacts to less-than-significant levels are identified in the impact analysis in Chapter 3 and listed in the table below. None of the measures have the potential to themselves result in significant impacts.

Table 11: Mitigation Monitoring and Reporting Program

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
Air Quality				
AQ-1: The most current FRAQMD Best Available Mitigation Measures for Construction Phase shall be incorporated as part of the project.	**During Construction**	**Construction Contractor**		
AQ-2: To mitigate impacts of construction vehicle and equipment emissions during construction, the following Mitigation Measures shall be incorporated as part of the project and included in all construction bid documents: • Water inactive construction sites and exposed stockpile sites at least twice daily. • Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e. minimum vertical distance between top of load and the trailer). • Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in height to allow development of microorganisms prior to replacement of soil in the construction area. These topsoil piles shall be clearly marked and flagged. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture. • Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by filt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used. • Equipment or manual watering shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.	**During Construction**	**Construction Contractor**		
AQ-3: The on-road heavy-duty truck fleet used for the Project will be limited to vehicles of model year 2010 or newer.	**During Construction**	**Construction Contractor**		
AQ-4: All off-road equipment used for the Project is required to meet CARB Tier 4 Standard.	**During Construction**	**Construction Contractor**		
Biological Resources				
BIO-1: All trees associated with riparian and oak woodland habitat that are 4 inches diameter breast height (DBH) and larger will be mitigated for at a 3:1 ratio onsite. Should it be determined that onsite mitigation is infeasible, an offsite mitigation option or other approved methods would be considered during the permitting phase of the Project.	**PSE**	**County**		
BIO-2: Immediately prior to the start of work, a qualified biologist shall conduct a survey to determine the presence or absence of northwestern pond turtles. If northwestern pond turtles are observed where they could be potentially impacted by Project activities, as determined by the on-site biologist, then work shall not be conducted within 100 feet of the sighting until the turtle(s) have left the Project site or a qualified biologist has relocated the turtle(s) immediately outside of the Project site.	**Prior to and During Construction**	**Project Biologist**		
BIO-3: If turtle eggs are uncovered during construction activities, then all work shall stop within a 25-foot radius of the nest and the qualified biologist should be notified immediately. The 25-foot buffer should be marked with identifiable markers that do not consist of fencing or materials that my block the migration of young turtles to the water or attract predators to the nest site. No work will be allowed within the 25-foot buffer until the turtle eggs have hatched or the nest fails.	**During Construction**	**Project Biologist**		
BIO-4: All portions of the Project site that could result in inadvertently trapping turtles, such as open pits, trenches, and de-watered areas will be covered and/or exclusion fencing will be installed to prevent turtles from entering these areas.	**During Construction**	**Construction Contractor**		
BIO-5: Staging areas as well as fueling and maintenance activities shall be a minimum of 250 feet from riparian or aquatic habitats. The Project proponent shall prepare a spill prevention and clean-up plan.	**During Construction**	**Construction Contractor**		
BIO-6: The Project shall administer BMPs to protect water quality and control erosion.	**During Construction**	**Construction Contractor**		

BIO-7:	All construction activities conducted in the riparian area along Dry Creek will be kept at a minimum to minimize vegetation removal and pruning.	**During Construction**	**Construction Contractor**		
BIO-8:	All riparian habitat that is to be removed for the construction of the roadway realignment and new bridge will be mitigated for at a 3:1 ratio onsite. Should it be determined that onsite mitigation is infeasible, an offsite mitigation option or other approved methods would be considered during the permitting phase of the Project.	**PSE**	**County**		
BIO-9:	Two nighttime preconstruction surveys will be conducted during or immediately following separate precipitation events between October and May when ponded water is present.	**Prior to Construction**	**Project Biologist**		
BIO-10:	Should any life stages of western spadefoot be found within the Project boundary, CDFW will be consulted prior to the initiation of Project activities to determine appropriate avoidance and minimization efforts.	**Prior to Construction**	**Project Biologist**		
BIO-11:	A preconstruction survey shall be conducted within 14 days of the start of Project activities.	**During Construction**	**Project Biologist**		
BIO-12:	If there is a lapse between Project activities of more than 14 days, an additional survey shall be conducted within 24 hours prior to ground disturbance.	**During Construction**	**Project Biologist**		
BIO-13:	If a burrowing owl or its burrow is observed within the Project limits or within 500 feet of the Project limits, work will stop within 500 feet of the observation, and the GE Project Manager and the Resident Engineer shall be contacted.	**During Construction**	**Project Biologist and Contractor**		
BIO-14:	Additionally, if a burrowing owl or its burrow is observed on site, the Contractor shall implement avoidance and minimization measures.	**During Construction**	**Project Biologist and Contractor**		
BIO-15:	Begin construction activities outside of the avian breeding season (March 1 – August 31) to avoid potential impacts to nesting California black rails and deter California black rails from nesting within close proximity of the Project site.	**During Construction**	**Construction Contractor**		
BIO-16:	If Project activities cannot begin outside of the avian breeding season (March 1 – August 31) then a California black rail survey will be conducted employing the protocol used in the Richmond *et al.* 2008 *Distribution of California Black Rails in the Sierra Nevada Foothills* to determine presence or absence of California black rails within the BSA. Survey(s) must include the following protocol measures: • A qualified biologist, with working knowledge of California black rail protocol-level surveys, will conduct three California black rail surveys using the CDFW-approved Richmond *et al.* (2008) call playback survey protocol within suitable habitat areas in the BSA (i.e., Albion Creek and Vineyard Creek). Surveys will be conducted a minimum of 2 weeks apart OR a minimum of 1 week apart if construction is to begin within 7 days of the last survey. • Avoid conducting surveys during environmental conditions that may affect the ability to hear or see California black rails (i.e., heavy rain, dense fog, winds > 20 mph). • If California black rails are detected within or within close proximity of the BSA, then the County will be notified within two working days of the observation and will consult with CDFW for further guidance. • If, for any reason, construction activities are stopped for 15 days or more within the avian breeding season, then one additional California black rail survey will be conducted prior to reinitiating construction activities.	**Prior to and During Construction**	**Project Biologist**		
BIO-17:	During construction activities, all trash shall be removed from the worksite and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.	**During Construction**	**Construction Contractor**		
BIO-18:	All construction equipment shall stay within designated areas and within designated construction traffic routes to avoid any unnecessary vegetation and/or ground disturbances. When construction equipment or construction related vehicles are in route, they shall remain at a low speed limit to minimize dust.	**During Construction**	**Construction Contractor**		
BIO-19:	There shall be no staging of construction equipment outside of the Project Boundary.	**During Construction**	**Construction Contractor**		

BIO-20: All construction personnel shall remain in the limits of the Project Boundary and will avoid wetland areas around Albion Creek and Vineyard Creek.	**During Construction**	**Construction Contractor**		
BIO-21: All fueling and/or equipment maintenance shall occur 250 feet from all water bodies and riparian areas, except for pile drivers or other stationary equipment, and a spill prevention plan (SPP) will be created and implemented if a spill or equipment leak occurs during construction activities. Any spill within the active channel of Dry Creek will be reported to NMFS, CDFW and other appropriate resource agencies within 24 hours. Spill prevention measures will include stockpiling absorbent booms, staging hazardous materials at least 25 feet away from the river, and maintaining and checking construction equipment to prevent fuel and lubrication leaks. SWPPP measures will utilize applicable BMPs such as use of silt fences, straw bales, other methods necessary to minimize storm water discharge associated with construction activities.	**During Construction**	**Construction Contractor**		
BIO-22: Begin construction activities prior to the avian breeding season (March 1 – August 31) to avoid potential impacts to nesting Swainson's hawk and to deter Swainson's hawks from nesting within a quarter-mile of the Project Boundary.	**During Construction**	**Construction Contractor**		
BIO-23: If Project activities cannot begin prior to the avian breeding season (March 1 – August 31), then a Swainson's hawk pre-construction survey will be conducted to determine presence or absence of nesting Swainson's hawks within a quarter-mile of the Project Boundary. A pre-construction survey will be conducted within 7 days prior to ground disturbing activities. Survey(s) must include the following protocol measures: • Conduct a Swainson's hawk pre-construction survey 7 days prior to construction activities within a quarter-mile radius of the Project Boundary. • If a Swainson's hawk nest is observed within a quarter-mile radius of the Project Boundary, the County will be notified and will then consult with CDFW for further guidance. • If construction activities stop for 15 days or longer, another Swainson's hawk survey will be conducted within 7 days prior to the continuation of construction activities.	**Prior to Construction**	**Project Biologist**		
BIO-24: Project activities, including site grubbing and vegetation removal, within the BSA shall be initiated outside of the bird nesting season (March 1 – August 31).	**During Construction**	**Construction Contractor**		
BIO-25: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur: • A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. • If an active tricolored blackbird nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.	**Prior to Construction**	**Project Biologist**		
BIO-26: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur: • A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. • If an active grasshopper sparrow nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.	**Prior to and During Construction**	**Project Biologist**		
BIO-27: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur: • A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. • If an active long-eared owl nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.	**Prior to and During Construction**	**Project Biologist**		

BIO-28: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur: • A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. • If an active northern harrier nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.	**Prior to and During Construction**	**Project Biologist**		
BIO-29: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur: • A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. • If an active Modesto population song sparrow nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the preconstruction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.	**Prior to and During Construction**	**Project Biologist**		
BIO-30: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur: • A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. • If an active yellow warbler nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.	**Prior to and During Construction**	**Project Biologist**		
BIO-31: If Project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of 15 days or longer during the bird nesting season, then the following will occur: • A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. • If an active yellow-breasted chat nest (i.e. with egg(s) or young) is observed within 200 feet of the Project Boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored twice per week by a qualified biologist and a report submitted to the County.	**Prior to and During Construction**	**Project Biologist**		
BIO-32: Any vegetation removal, ground disturbances, and removal actions to the existing Waldo Road Bridge should be conducted prior to the avian breeding season (March 1 – August 31).	**During Construction**	**Construction Contractor**		
BIO-33: If the construction of the new bridge and roadway realignment will occur during the avian breeding season (March 1 – August 31), prior to the start of construction, a migratory bird and raptor survey will be conducted by a qualified biologist to identify any active nests within 200 feet of the Project Boundary. A qualified biologist shall: • Conduct a survey for all birds protected by the MBTA and CFGC within 7 days prior to the initiation of construction activities and map all nests located within 200 feet of the Project Boundary; • Develop buffer zones around active nests as recommended by a qualified biologist. Construction activities shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored at least twice per week to determine nesting status. • If construction activities stop for 15 days or longer, then another migratory bird and raptor survey shall be conducted within 7 days prior to the continuation of construction activities.	**Prior to and During Construction**	**Project Biologist**		
BIO-34: If removal of the existing Waldo Road Bridge will occur during the avian breeding season (March 1 – August 31), then exclusion and monitoring activities will be implemented to exclude all avian nests from the existing Waldo Road Bridge. Exclusion and monitoring activities include the following: <u>Exclusion</u>	**Prior to and During Construction**	**Construction Contractor and Project Biologist**		

• All inactive avian nests should be removed from the bridge by a qualified biologist prior to March 1 to deter avian species from nesting on the bridge. • If exclusionary devices are necessary to prevent avian species from nesting on the existing bridge, then exclusion devices shall be installed prior to March 1 under the supervision of a qualified biologist. Exclusionary devices are to be maintained and monitored by a qualified biologist until the removal of the existing bridge has been initiated. An exclusion plan shall be created by a qualified biologist and a report sent to the County and CDFW for approval. <u>Monitoring</u> • Weekly or as necessary monitoring, or additional exclusion activities, will be conducted by a qualified biologist on the existing bridge after March 1 until all bridge removal activities are complete or the end of the avian breeding season (August 31).				
BIO-35: Demolition activities and vegetation removal should begin prior to the maternity season or non-volant period (April 1 – August 31), when young bats are present but are unable to fly. If demolition does take place prior to the non-volant period, then a qualified biologist should be onsite during demolition activities to monitor for the presence of winter roosting bats.	**During Construction**	**Construction Contractor and Project Biologist**		
BIO-36: If demolition activities and vegetation removal cannot begin prior to the non-volant period than exclusion and monitoring activities will be implemented prior to demolition activities Exclusion and monitoring activities will include the following. <u>Exclusion</u> • Exclusion devices will be installed prior to the non-volant period (April 1 – August 31). Exclusion devices shall be maintained throughout the duration of bridge removal activities and removed after construction activities are complete. • An exclusion plan shall be created by a qualified biologist and a report sent to the County and CDFW for approval. <u>Monitoring</u> • Weekly or as necessary monitoring, or additional exclusion activities, will be conducted on the existing Waldo Road Bridge by a qualified biologist after excluding bats until bridge removal activities are complete or until the end of the non-volant period (August 31).	**Prior to and During Construction**	**Construction Contractor and Project Biologist**		
BIO-37: If bridge removal activities are conducted prior to the non-volant period and construction activities for the new bridge cannot begin prior to the non-volant period (April 1 – August 31), then a qualified biologist will conduct a pre-construction bat exit survey no more than seven days prior to the start of construction activities to determine if bats are utilizing Waldo Road Bridge. If bats are observed roosting within Waldo Road Bridge, then the following avoidance and minimization measures shall be implemented. • Workers and vehicle disturbance shall not be allowed under the existing Waldo Road Bridge. • Construction equipment shall not be parked under the Bridge. • High beam lights shall not be used at any time under the existing bridge.				
BIO-38: A pre-construction survey for roosting western red bats will be conducted by a qualified biologist within 7 days prior to the start of construction activities to determine presence or absence of roosting western red bats within the BSA.	**Prior to Construction**	**Project Biologist**		
BIO-39: If roosting western red bats are observed within the BSA, the County will be notified within 2 working days of the observation. Additional avoidance and minimization measures may be implemented under the guidance of the biologist.	**Prior to Construction**	**Project Biologist**		
BIO-40: All riparian trees that are to be removed for the construction of the roadway realignment and new bridge shall be mitigated for at a 3:1 ratio onsite. Should it be determined that onsite mitigation is infeasible, an offsite mitigation option or other approved methods would be considered during the permitting phase of the Project.	**PSE**	**County**		
BIO-41: Mitigation for impacts to jurisdictional WOTUS will be addressed through the purchase of credits at a Corps-approved mitigation bank or payment to a Corps approved in-lieu fund as determined appropriate by the regulatory agencies.	**PSE**	**County**		
BIO-42: It is recommended that general BMPs be implemented prior to and during construction activities, as recommended under the Cal-IPC's Preventing the Spread of Invasive Plants: Best Management Practices for Transportation and Utility Corridors (2012). The following are the recommended general BMPs under Cal-IPC: • Schedule activities to minimize potential for introduction and spread of invasive plants.	**During Construction**	**Construction Contractor**		

• Designate specific areas for cleaning tools, vehicles, equipment, clothing and gear. • Designate waste disposal areas for invasive plant materials and contain invasive plant material during transport. • Plan travel routes to avoid areas infested with invasive plants. • Clean tools, equipment, and vehicles before transporting materials and before entering and leaving worksites. • Clean clothing, footwear, and gear before leaving infested areas. • Prepare worksites to limit the introduction and spread of invasive plants. • Minimize soil and vegetation disturbance.				
BIO-43: Activities conducted in the active channel of Dry Creek will be limited to the timeframe between July 1 and October 31, outside of the window for adult O. mykiss pop.11 migration and spawning, egg incubation, and fry emergence.	**During Construction**	**Construction Contractor**		
BIO-44: A silt screen will be installed prior to and remain intact and functional during all in-water construction to prevent sediment drift. Silt screens must not inhibit the upstream or downstream movement of aquatic wildlife.	**During Construction**	**Construction Contractor**		
BIO-45: Disturbance within Dry Creek will be kept to a minimum during construction activities and will only occur within designated areas.	**During Construction**	**Construction Contractor**		
BIO-46: If a water diversion will be utilized in Dry Creek it must be in place between July 1 and October 31. The clear water diversion must not inhibit the upstream or downstream movement of aquatic wildlife. A biological monitor will be on-site prior to and during the installation and removal of the water diversion. The qualified biologist must possess a vast knowledge on salmonid life history. No fish relocations will occur.	**During Construction**	**Construction Contractor / Project Biologist**		
BIO-47: An erosion control plan (ECP) that incorporates erosion BMPs shall be created and implemented prior to the wet season (October 15 – April 1) to avoid sediment runoff from entering waters of the U.S. Applicable BMPs will include permanent and temporary erosion control measures, such as straw bales, mulch or wattles, silt fencing, filter fabric, spill remediation material such as absorbent booms, and/or a native fast growing seed mix as prescribed in the ECP and stormwater pollution prevention plan (SWPPP). BMPs shall be implemented that are necessary to minimize the risk of sedimentation, turbidity, and hazardous material spills.	**During Construction**	**Construction Contractor**		
BIO-48: Portions of the streambed of Dry Creek disturbed by construction activities will be restored to a pre-construction condition to the greatest extent practicable.	**During Construction**	**Construction Contractor**		
BIO-49: Through the development and implementation of a Riparian Restoration Plan the banks of Dry Creek and all upland areas will be revegetated and seeded using a native plant and seed mix at the end of the construction. The plan will be required to be submitted to NMFS for review and approval and will include measures such as a watering and monitoring schedule, reporting and corrective action conditions.	**During Construction**	**Construction Contractor / Project Biologist**		
Cultural Resources				
CUL-1: Per the proposed *Memorandum of Agreement Between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Waldo Road over Dry Creek Bridge Replacement Project, Yuba County, California* (MOA), the following measures shall be implemented to resolve adverse effects to Waldo Road Bridge:	**Prior to Construction**	**County/ Caltrans/ Project Architectural Historian**		
• **CUL-1a: Recordation.** Caltrans District 3 shall ensure that the County shall record and document the Waldo Road Bridge to the standards of the Historic American Engineering Record (HAER). This recordation and documentation will be conducted as follows:	**Prior to Construction**	**Project Architectural Historian**		
i. Prior to the commencement of construction activities for the project, the County shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) calendar days of receiving the NPS stipulation letter, the County shall send a copy of the letter to all parties to this MOA for their information. If no response is received within ninety (90) calendar days of submittal to NPS, Caltrans shall confer with SHPO on how to move forward with HAER documentation.	**Prior to Construction**	**County/ Project Architectural Historian**		

ii. The County shall ensure that all recordation documentation activities are performed or directly supervised by architects, architectural historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).	**Prior to Construction**	**County**		
iii. The County shall prepare HAER documentation for the Waldo Bridge as per the NPS stipulation letter, or as directed by Caltrans.	**Prior to Construction**	**Project Architectural Historian**		
a. Caltrans shall have thirty (30) calendar days to review and comment on the draft HAER documentation.	**Prior to Construction**	**Caltrans**		
b. The County shall revise the draft HAER in response to Caltrans comments and submit draft HAER documentation to NPS.	**Prior to Construction**	**Project Architectural Historian**		
c. The County shall prepare the final HAER documentation in response to NPS comments and directions. The County shall send final archival HAER documentation to NPS.	**Prior to Construction**	**Project Architectural Historian**		
iv. Upon receipt of the NPS written acceptance letter, the County shall make archival, digital, and/or bound copies of the documentation and provide them to the Caltrans Library and History Center, Sacramento; the California Office of Historic Preservation; and the Caltrans Cultural Studies Office. Additional copies will be offered to the Wheatland Historical Society in Wheatland, Mary Aaron Museum in Marysville, California Historical Society, California Preservation Foundation, and North Central Information Center of the California Historical Resources Information Center.	**Prior to Construction**	**County**		
v. Caltrans shall notify SHPO that the documentation is complete and all copies are distributed as outlined in MOA Stipulation II.A.4. Completion of the documentation shall be included in the annual report outlined in MOA Stipulation IV.G. All documentation shall be completed prior to the commencement of the project's construction activities.	**Prior to Construction**	**Caltrans**		
• **CUL-1b: Interpretation.** i. Caltrans District 3 shall ensure that the County will design, produce, and install a permanent metal plaque on a concrete mount no later than one year following completion of construction. The plaque will provide a brief history of the historic Waldo Road Bridge, a physical description of the structure and its engineering features, and its significance. The plaque will be installed at a publicly accessible site in close, visual proximity to the Waldo Road Bridge crossing, within County right-of-way so that it can be visible to those traveling through the area and utilizing the Spenceville Wildlife Area.	**During / Post Construction**	**County and Caltrans**		
a. Caltrans shall have thirty (30) calendar days to review and comment on the design and text of the new plaque before it is produced and installed. If revisions are needed, the County will resubmit the design to Caltrans District 3 for review and approval.	**During / Post Construction**	**Caltrans and County**		
b. Following approval by Caltrans District 3, Caltrans District 3 shall submit the draft copy of the plaque design and text to the MOA signatories. The signatories will have thirty (30) calendar days to review and comment on the design. Caltrans District 3 will take any comments into account in revising the draft plaque and provide the MOA parties with written documentation indicating whether and how the design will be modified in accordance with any comments received. Objections will be resolved using the process outlined in MOA Stipulation IV.C.	**During / Post Construction**	**Caltrans**		
c. Caltrans District 3 will inform the SHPO within 90 days following the installation of the plaque, and completion of this treatment measure will be documented in the annual report outlined MOA Stipulation IV.C.	**During / Post Construction**	**Caltrans**		
ii. Caltrans District 3 shall ensure that the County will prepare and produce a booklet discussing the construction and engineering of the Waldo Road Bridge and its use within the context of Yuba County history. The booklet shall be prepared within one year following completion of recordation under MOA Stipulation II.A. It shall be paperback, not to exceed 10 pages, and shall include high quality black and white images of the Waldo Road Bridge, copies of historic photographs and/or drawings, as appropriate, and text describing the Waldo Road Bridge, its design, construction, and use. Data for the booklet will be based on the HAER prepared under MOA Stipulation II.A and other relevant historical reports or documentary sources.	**During / Post Construction**	**County and Project Architectural Historian**		
a. The County shall submit a draft copy to Caltrans District 3 prior to making the booklet available to recipients. Caltrans District 3 will have thirty (30) calendar days to review and comment on the booklet. If revisions are needed, the County will resubmit the booklet to Caltrans District 3 for review and approval.	**During / Post Construction**	**County; Project Architectural Historian;**		

		Caltrans		
b. Following approval by Caltrans District 3, Caltrans shall submit the draft copy of the booklet to the MOA signatories. The signatories will have thirty (30) calendar days to review and comment on the booklet. Caltrans District 3 will take any comments into account in revising the draft booklet and provide the MOA parties with written documentation indicating whether and how the booklet will be modified in accordance with any comments received.	**During / Post Construction**	**Caltrans**		
c. Following the comment period for the MOA signatories, the County shall produce hardcopies and a print-on-demand electronic version for distribution to local repositories, including, but not necessarily limited to, the Wheatland Historical Society in Wheatland, Mary Aaron Museum in Marysville, and Yuba County Public Library. One copy shall be submitted to Caltrans District 3 and the Caltrans Transportation Library and History Center in Sacramento, and electronic versions shall be submitted to the MOA signatories.	**During / Post Construction**	**County and Project Architectural Historian**		
d. The County shall maintain the high-resolution print-ready electronic version of the booklet for up to five years and produce additional copies within that time frame if there is demand.	**During / Post Construction**	**County**		
e. Caltrans District 3 will inform the MOA signatories within 90 days following the completion of this treatment measure, and completion of this treatment measure will be documented in the annual report outlined in MOA Stipulation IV.G.	**During / Post Construction**	**Caltrans**		
• **CUL-1c: Discoveries and Unanticipated Effects.** i. As legally mandated, human remains and related items discovered during the implementation of the terms of this Agreement and the Undertaking will be treated in accordance with the requirements of Health and Safety Code Section 7050.5(b). If pursuant to of Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Sections 5097.98 (a)- (d). Caltrans shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined by the California Native American Heritage Commission, are taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.	**During Construction**	**County and Construction Contractor**		
ii. If Caltrans determines, during implementation of the terms of this MOA or after construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for listing in the NRHP or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder assume any discovered property to be eligible for the NRHP in accordance with 36 CFR §800.13.	**During Construction**	**Caltrans and County**		
CUL-2: Per the proposed *Archaeological Monitoring Area and Environmentally Sensitive Area Action Plan for the Waldo Road over Dry Creek Bridge Replacement Project, Yuba County, California*, the following measures shall be implemented as part of the Finding of No Adverse Effect to protect sensitive areas within the boundary of CA-YUB-1924/H and to monitor ground disturbing activity within the APE:	**Prior to, During, and Post Construction**	**Caltrans/ County/ Project Archaeologist**		
• **CUL-2a:** The ESA and AMA are clearly described and illustrated on the final construction design, plans, and specifications used by construction personnel.	**PSE and Prior to Construction**	**County and Project Archaeologist**		
• **CUL-2b:** All responsible parties, including the Caltrans Project Archaeologist, will review the plans, specifications, and estimates, and ensure that the SSP's for the ESA and AMA are included and that the ESA and AMA are clearly defined and illustrated.	**PSE and Prior to Construction**	**Caltrans/ County/ Project Archaeologist/ Resident Engineer**		
• **CUL-2c:** The ESA and AMA will be discussed during the preconstruction meeting and ESA and AMA restrictions and historic preservation laws are disseminated in writing to construction and field personnel. The importance of the ESA will be discussed with construction personnel and it will be stressed that no construction activity (including the storing or staging of materials and equipment) should occur within the ESA and that workers must remain outside of the ESA at all times. The importance of the AMA will also be discussed and that no ground disturbing work can be done within the AMA without the archaeological monitor and Native American monitor present.	**Prior to Construction**	**County/Project Archaeologist/ Resident Engineer**		

• **CUL-2d:** The Resident Project Engineer will notify the Project Archaeologist at least three weeks in advance of construction to ensure that an archaeologist will be available to monitor fence installation and allow for field review of the ESA locations.	**Prior to Construction**	**Resident Engineer**		
• **CUL-2e:** The Contractor will install temporary plastic "ESA" fencing along the ESA. The fencing will be installed at least one week prior to initiating any work. An archaeologist qualified under the PA will supervise and monitor fence installation.	**Prior to Construction**	**Construction Contractor/ Project Archaeologist**		
• **CUL-2f:** The Caltrans Project Archaeologist will be notified when construction begins. The ESA and ESA fencing will be inspected weekly by an archaeologist qualified under the PA to ensure the integrity of the ESA is maintained. All ground disturbing work within the AMA will be monitored by an archaeologist qualified under the PA and a NA monitor.	**Prior to and During Construction**	**Resident Engineer/ Project Archaeologist**		
• **CUL-2g:** The State Historic Preservation Officer and the Caltrans Cultural Studies Office will be notified within 48 hours of any ESA breach and consult immediately to determine how the breach will be addressed. Representatives of local Native American groups will also be consulted.	**During Construction**	**Project Archaeologist / Caltrans Project Archaeologist**		
• **CUL-2h:** Caltrans Project Archaeologist will be informed when construction is finished.	**Post Construction**	**Project Archaeologist**		
• **CUL-2i:** The Contractor, under supervisions of an archaeologist qualified under the Caltrans Section 106 PA, will remove temporary "ESA" fencing at the conclusion of construction.	**Post Construction**	**Construction Contractor/ Project Archaeologist**		
Hazards and Hazardous Materials				
HAZ-1: The presence of lead in soil within the Project area and paint on the bridge indicate that the requirements of Construction Safety Orders, Section (§) 1532.1 Lead, are applicable to work performed within the Project limits but a pre-work notification is not required. In addition, Caltrans Special Provision 7-1.02K(6)(j)(iii) is applicable to address safety measures associated with handling of lead containing earth materials.	**During Construction**	**Construction Contractor**		
HAZ-2: If more than 160 square feet, 260 linear feet or 35 cubic feet of regulated asbestos containing material (RACM) is discovered and planned for removal on the Project, formal written notification to the CARB is required.	**Prior to Construction**	**County and Construction Contractor**		
HAZ-3: If RACM is discovered during site work and planned for disturbance at the bridge site then Cal/OSHA Construction Safety Orders, §1529 Asbestos is applicable.	**During Construction**	**Construction Contractor**		
HAZ-4: Monitoring will be conducted during construction to evaluate the absence or presence of Munition and Explosive of Concern (MEC). Further evaluation for the presence of MEC in the Project area may be required. In the event that MEC is identified, appropriate removal and disposal of MEC should be completed in accordance with regulatory standards.	**During Construction**	**Construction Contractor**		
Hydrology/Water Quality				
WQ-1: Prior to the County's approval of a grading plan or site improvement plans, the project applicant shall obtain from the Central Valley RWQCB a NPDES Permit for the disturbance of over one acre. Further, approval of a General Construction Storm Water Permit. The permitting process also requires that a SWPPP be prepared prior to construction activities. The SWPPP is used to identify potential construction pollutants that may be generated at the site including sediment, earthen material, chemicals, and building materials. The SWPPP also describes best management practices that will be employed to eliminate or reduce such pollutants from entering surface waters.	**Prior to Construction**	**Construction Contractor**		
Noise				
NOI-1: To minimize the construction-generated noise, abatement measures as specified in the special provisions under Standard Specification 14-8.02 "Noise Control" and SSP14-8.02 must be followed: ▪ Equip an internal combustion engine with the manufacturer recommended muffler.	**During Construction**	**Construction Contractor**		

▪ Do not operate an internal combustion engine on the job site without the appropriate muffler.				
Tribal Cultural Resources				
TCR-1: The County shall contact the UAIC at least 2 weeks prior to project ground-disturbing activities to retain the services of a Tribal Monitor(s). The duration of the construction schedule and Tribal Monitoring shall be determined at this time. A contracted Tribal Monitor(s) shall monitor the vegetation grubbing, stripping, grading, trenching, and other agreed-upon ground-disturbing activities in the project area. The Tribal Monitor, in consultation with the UAIC Tribal Historic Preservation Officer (THPO) and the County shall determine an end or reduction to the on-site monitoring if/when construction activities have a low potential for impacting Tribal Cultural Resources. Tribal Monitors or Tribal Representatives shall have the authority to direct that work be temporarily paused, diverted, or slowed within 100 feet of the immediate impact area if sites or objects of potential significance are identified. The temporary pause/diversion shall be of an adequate duration for the Tribal Representative to examine the resource. Once a potential discovery has been identified, the TCR Discovery Protocol (TCR-2) shall be implemented and followed. The County shall assist with resolution of disagreements between the Construction Contractor and the UAIC, if disagreements occur on the project. It is the responsibility of the Tribal Monitor(s) to wear the appropriate safety equipment while on the construction site and adhere to construction safety procedures and protocols. To track the implementation of this measure, the Tribal Monitor(s) shall document field-monitoring activities on a Tribal Monitor log.	**Prior to Construction**	**County**		
TCR-2: The County, in consultation with the UAIC, shall develop a TCR Discovery Protocol to be implemented during construction of the Project. The TCR Discovery Protocol will outline how the County and the UAIC will coordinate regarding Native American cultural resources discovered during construction, how those discoveries will be assessed and treated, and how human remains will be treated if discovered and if the UAIC is identified by the Native American Commission as the Most Likely Descendent. The TCR Discovery Protocol will be finalized prior to the start of construction and will be supplied to the Resident Engineer and Construction Manager. At no time, regardless of the presence or absence of a tribal monitor, shall suspected TCRs be mishandled or disrespected. Discussion of appropriate treatment of TCRs in the TCR Discovery Protocol may include but should not be limited to: • Recordation of the resource(s) • Avoidance and preservation of the resource(s) • Reburial of the resource(s) onsite in a designated area subject to no future disturbance (as specified in TCR-3). The location of the reburial shall be acceptable to the UAIC.	**Prior to Construction**	**County**		
TCR-3: The County, in consultation with the UAIC, will designate an area for the reburial of all collected Native American cultural resources, including those collected as part of previous archaeological investigations and any discovered during construction activities, that will be protected for all future ground disturbance either through a deed restriction or in perpetuity-marker designating the protected area. The County will also coordinate with the UAIC regarding compensation for reburial services.	**Prior to Construction**	**County**		
TCR-4: All disturbed areas would be restored to pre-construction contours and revegetated, through hydroseeding or other means. If hydroseed and plant mixes are used during or post-construction, plant species must consist of a biologist approved plant palate seed mix of native species sourced locally to the Project area.	**During and Post Construction**	**Construction Contractor/ Project Biologist**		

6 REPORT PREPARERS

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7 DISTRIBUTION LIST

Federal Government

United States Fish and Wildlife Service
Sacramento Fish and Wildlife Office
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Sacramento, CA 95825

US Army Corps of Engineers, Sacramento District
ATTN: Regulatory Branch
1325 J Street, Room 1480
Sacramento, CA 95814-2922

State Government

California State Clearinghouse
Online Submittal through CEQA Submit

California Department of Fish and Wildlife Region 2
1701 Nimbus Road
Rancho Cordova, CA 95670
R2Info@wildlife.ca.gov

Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670

Local Agencies

Yuba County Clerk-Recorder
915 8th Street, Suite 107
Marysville, CA 95901

Other Organizations

Yuba County Library
303 Second St
Marysville, CA 95901

Wheatland Historical Society
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Mary Aaron Museum
704 D Street
Marysville, CA 95901

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Appendix F: NMFS Section 7 FESA Consultation

Appendix F: NMFS Section 7 FESA Consultation

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region, California Central Valley Office
650 Capitol Mall, Suite 5-100
SACRAMENTO, CA 95814-4700

Refer to NMFS ECO#: WCR-2026-00520

March 27, 2026

Ms. Veronica Wilson
Senior Environmental Scientist
M1 Branch Chief
Caltrans North Region Environmental

Re: Endangered Species Act Section 7(a)(2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Yuba County, Waldo Road Over Dry Creek Bridge Replacement Project

Dear Ms. Veronica Wilson:

This letter responds to your January 29, 2026, request for concurrence from the National Marine Fisheries Service (NMFS) pursuant to Section 7 of the Endangered Species Act (ESA) for the subject action. Your request qualified for our expedited review and concurrence because it contained sufficient information on your proposed action and its potential effects to ESA-listed species and designated critical habitat.

Updates to the regulations governing interagency consultation (50 CFR part 402) were effective on May 6, 2024 (89 FR 24268). We are applying the updated regulations to this consultation. The 2024 regulatory changes, like those from 2019, were intended to improve and clarify the consultation process, and, with one exception from 2024 (offsetting reasonable and prudent measures), were not intended to result in changes to the Services' existing practice in implementing section 7(a)(2) of the ESA (84 FR 45015; 89 FR 24268. We have considered the prior rules and affirm that the substantive analysis and conclusions articulated in this letter of concurrence would not have been any different under the 2019 regulations or pre-2019 regulations.

We reviewed the California Department of Transportation (Caltrans) consultation request document and related materials. Based on our knowledge, expertise, and your action agency's materials, we concur with the action agency's conclusions that the proposed action is not likely to adversely affect federally threatened California Central Valley (CCV) steelhead (*Oncorhynchus mykiss*). The action area is not within designated critical habitat for CCV steelhead. Therefore, critical habitat for this species will not be considered in the consultation, though habitat impacts that may affect individuals are analyzed.

Caltrans and Yuba County Department of Public Works proposes to implement the Waldo Road over Dry Creek Bridge Replacement Project (Project) to replace the structurally deficient Waldo

Road Bridge (Bridge No. 16C0006). The Project is located on Dry Creek, a tributary of the Bear River in the Feather River basin, California, and within the Spenceville Wildlife Area, an 11,900-acre wildlife preserve administered by the California Department of Fish and Wildlife. The new bridge will be constructed approximately 100 feet upstream of the existing bridge. Following construction of the new bridge, the existing bridge will be demolished. The Project is expected to take place over one construction season.

There have been observations of CCV steelhead in Dry Creek including the vicinity of the Project site following recent restoration efforts. All in-water construction activities will be conducted during the in-water work window (Jul 1 – Oct 31), when CCV steelhead are least likely to be present in the action area due to poor water quality conditions. Water depth in the action is shallow and average water temperatures between the months of July and September are likely to exceed 68 degrees Fahrenheit limiting CCV steelhead presence during construction activities. The proposed action includes implementation of conservation measures such as sediment control and best management practices during construction to minimize adverse effects to adult and juvenile fish. The Project will result in small scale temporary and permanent impacts to instream habitat in Dry Creek from construction activities (see Figure 1).

The proposed new bridge is a continuous three-span, post-tensioned concrete box girder bridge. The footprint of the spans are 72 feet, 96 feet, and 72 feet respectively. The bridge will have two, ten-foot travel lanes and two, two-foot shoulders. A vehicular railing will be attached to the edge of deck of the new structure. The bridge will include two end support abutments built on spread footing foundations, both embedded and doweled into solid rock at each support and protected by rock slope protection (RSP). New bridge construction will also include two, three-foot diameter, span support piers that will be built on spread footing foundations, not requiring any pile driving or drilling.

Pier construction will require installation of a water diversion in the vicinity of the new bridge within Dry Creek. The diversion will be constructed out of staked concrete k-rail wrapped in plastic sheeting extending out from the bank into the flowing channel to the extent necessary to excavate to an 8-foot depth for construction of the pier foundations. Within the k-rail cofferdam, clean rock will be slowly pushed out into the flowing channel to create a work pad large enough and high enough to ensure equipment remains dry. The piers will be constructed at each bank, away from the middle of the channel, ensuring flow within the creek will remain open through the center of the Dry Creek channel. During the construction of the bridge spans, falsework supports will be located outside of the flowing channel of Dry Creek. Additionally, RSP will not be placed around the piers or within the flowing channel.

The Project will result in 0.165 acre of temporary impacts to instream habitat below the ordinary high-water mark as a result of construction related activities. This includes, installation of a water diversion necessary to construct the new bridge (0.124 acre) and the construction of a gravel pad necessary to demolish the old bridge (0.041 acre). Installation of the temporary water diversion will not inhibit upstream or downstream movement of fish by leaving an approximately 40-foot-wide opening for water to move through the site. The temporary water diversion and gravel pad will be removed upon completion of in-water construction activities and the portions of the streambed disturbed by construction will be restored to a pre-construction condition. Installation and removal of the temporary water diversion and gravel pad will also

result in temporary increases in turbidity in the water column. The proposed action includes the placement of a silt screen prior to all in-water construction to prevent sediment drift minimizing downstream impacts to CCV steelhead.

The Project would result in the removal of approximately 0.33 acre of riparian vegetation, including vegetation removal from Dry Creek banks. Riparian vegetation provides food sources for juvenile steelhead and shade from the vegetation buffers water temperature. Both are essential for juvenile growth and survival while rearing. The proposed action includes the implementation of an onsite Riparian Restoration Plan following construction to revegetate and seed the banks and surrounding upland area using a native plant and seed mix. The plan will be submitted to NMFS for review and approval and will include measures such as a watering and monitoring schedule, reporting, and corrective action conditions.

The Project will result in a loss of 0.006 acre of instream habitat as a result of pier placement for the new bridge. The removal of piers from demolition of the old bridge will add 0.002 acre of instream habitat, resulting in a net permanent loss of 0.004 acre. The conversion of water bottom to piers will decrease juvenile rearing habitat. The Project will create 0.07 acres of shade over Dry Creek as a result of new bridge construction. The demolition of the old bridge will remove 0.04 acre of shade over Dry Creek, thus resulting in 0.03 acre of shade added from bridge construction. The increased shade over water as a result of bridge construction can create predator hot spots for juvenile fish migrating downstream. Dry Creek is not designated as critical habitat for CCV steelhead. However, the habitat in the action area supports juvenile rearing and adult migration excluding summer months when increased water temperatures are not suitable to support steelhead life stages. The quantity of permanent habitat loss and shade created as a result of the Project is small in relative scale. There is an adequate amount of habitat for CCV steelhead adjacent to the Project site and the small increase in shade is not anticipated to substantially increase predation on juvenile fish.

Habitat Impacts	Temporary (acres)	Permanent (acres)	Mitigation
Riparian Vegetation Removal	0.33		Plant/Seed
Instream Work – Water Diversion/Gravel Pad	0.165		Restore to Pre-Project Condition
New Bridge Construction (Shading)		0.03	NA
Pier Installation (Habitat Conversion)		0.004	NA
Total	0.495	0.034	

Figure 1. Project Related Impacts to Dry Creek Habitat

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The concurrence letter will be available through NMFS' Environmental Consultation Organizer. A complete record of this consultation is on file at NMFS California Central Valley Office, in Sacramento, California.

Reinitiation of consultation is required and shall be requested by Caltrans, where discretionary federal involvement or control over the action has been retained or is authorized by law and (1) the proposed action causes take; (2) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the written concurrence; or (4) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA consultation.

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including conservation measures and any determination you made regarding the potential effects of the action. This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.

The proposed action occurs within EFH for federally managed fish species within the Pacific Coast Salmon Fisheries Management Plan (Pacific Coast Salmon FMP). All evolutionarily significant units of Chinook salmon (*Oncorhynchus tshawytscha*) in the Central Valley are managed under the Pacific Coast Salmon FMP, but only Central Valley fall- and late fall-run Chinook salmon are likely to occur within the action area. The Project does not occur within, or in the vicinity of, Habitat Areas of Particular Concern (HAPCs). The conditions in Dry Creek provide marginal freshwater EFH for juvenile and adult Chinook salmon because the habitat is degraded, there is low food supply sources, and increased water temperature during summer months are not suitable to support Chinook salmon life stages.

The Project will result in small scale temporary and permanent impacts to freshwater EFH for Chinook salmon (See Figure 1). The proposed action includes conservation measures to reduce turbidity and maintain volitional passage in order to minimize short term localized impacts (0.165 acre) to rearing and migration corridor EFH during in-water construction activities. Following construction, temporary disturbances to EFH resulting from installation of a water diversion and gravel work pad will be removed and the habitat restored to pre-project conditions. Riparian vegetation removed (0.33 acre) from Dry Creek banks for new bridge construction will have negative effects on juvenile rearing EFH by reducing food resources and cover. The proposed action includes the implementation of an onsite Riparian Restoration Plan that will include seeding and plantings along the creek banks to offset negative effects to EFH. The plan will be submitted to NMFS for review and approval prior to construction. Permanent loss of water bottom (0.04 acre) and shade created over Dry Creek (0.03 acre) from new bridge placement will have negative effects on juvenile and adult EFH by reducing available rearing and migratory habitat but is relatively small in scale. The existing conditions of freshwater EFH in the action area are marginal for Chinook salmon and HAPCs do not occur in Dry Creek. There is an adequate amount of juvenile and adult EFH remaining adjacent to the Project site. Therefore, in this case, NMFS concluded the action would not adversely affect EFH for Chinook salmon. Thus, consultation under the MSA is not required for this action.

Caltrans must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations (50 CFR 600. 920(l)). This concludes the MSA consultation.

Please direct questions regarding this letter to Kimberly Clements in the Central Valley Office at (916) 930-3724 or via email at Kimberly.Clements@noaa.gov.

Sincerely,

Jonathan Ambrose
South Central Valley Branch Chief
California Central Valley Office

cc: ARN 151422-WCR2026-SA0007
Gregory Saiyo, Caltrans, Gregory.Saiyo@dot.ca.gov

January 7, 2026

Proposed Action

The California Department of Transportation (Caltrans) and Yuba County Department of Public Works (County) are proposing to implement the Waldo Road over Dry Creek Bridge Replacement Project (Project) to replace the structurally deficient Waldo Road Bridge (Bridge No. 16C0006) over Dry Creek, a tributary of the Bear River in the Feather River basin, with a new bridge approximately 100 feet upstream of the existing bridge. The Project is located in rural Yuba County, roughly 14 miles northeast of Wheatland. Waldo Road is a generally north/south road and the bridge crosses Dry Creek on a generally north/south alignment. Waldo Road and connecting roads Spenceville Road and Camp Far West Road, are all lightly traveled routes passing through the Sierra Nevada foothills. The bridge is located within the Spenceville Wildlife Area, an 11,900-acre wildlife preserve, and public outdoor recreation area administered by the California Department of Fish and Wildlife (CDFW).

The existing bridge, constructed in 1901, is currently classified as structurally deficient, with a sufficiency rating of 9.3. A new bridge is necessary to meet current design and safety standards which can safely convey vehicles, including emergency response vehicles, and pedestrians across Dry Creek. The replacement bridge will meet current applicable County, America Association of State Highway and Transportation Officials, and Caltrans design standards.

The new bridge will require a realignment of the roadway, which will correct the existing substandard curves on roadway approaches to the bridge. The vertical profile of the new bridge will be raised slightly to provide sufficient water conveyance beneath the bridge during flood events. This will also require a slight rise in the approach roadway elevation, which will gradually decrease until the realigned roadway conforms to the existing roadway elevations.

The proposed new bridge is a continuous three-span, post-tensioned concrete box girder bridge. The spans are 72 feet, 96 feet, and 72 feet respectively. It will have two, ten-foot travel lanes and two, two-foot shoulders and provide a clear width between barrier rails of 24 feet. A vehicular railing will be attached to the edge of deck of the new structure. Abutments 1 and 4 (the end supports) will be founded on spread footing foundations, both embedded and doweled into intact rock at each support and protected by rock slope protection (RSP). Piers 2 and 3 (the mid-span supports) will be two, three-foot diameter columns founded on spread footing foundations, not requiring any pile driving or drilling.

The construction of pier 2 and 3, however, will require the installation of a water diversion which would be in place within Dry Creek during the time of year salmonids are not likely present (Jul 1 – Oct 31). The creek diversion will be constructed out of staked concrete k-rail wrapped in visqueen extending out from the bank into the flowing channel to the greatest extent necessary to excavate the 8-foot depth to construct the pier foundations. Within the k-rail cofferdam, clean fish rock will be slowly pushed out into the flowing channel to create a work pad large enough and high enough out of the water to place equipment. As pier 2 and 3 are to be constructed at each bank and no piers are to be constructed in the middle of the channel, flow within the creek will remain open through the center of the Dry Creek channel. For construction of the bridge spans, falsework supports will be located outside of the flowing channel of Dry Creek. Additionally, RSP will not be placed around the piers or within the flowing channel.

Once the new bridge has been constructed, the existing bridge would be demolished. Acquisition of permanent right-of-way is anticipated for this Project. Since the proposed alignment is shifting the new bridge to the east along with new approach alignments, Yuba County will no longer need to right-of-way a portion of the existing right-of-way along the existing alignment, which can be given to CDFW for use in the Spenceville Wildlife Area.

Conservation Measures and BMPs

The applicant has agreed to implement the following mitigation measures in order to minimize the risk of harm to the listed *O. mykiss pop.11* and Chinook salmon EFH:

The following are recommended measures to avoid impacts to *O. mykiss pop.11* and Chinook salmon EFH:

1. Activities conducted in the active channel of Dry Creek will be limited to the timeframe between July 1 and October 31, outside of the window for adult *O. mykiss pop.11* migration and spawning, egg incubation, and fry emergence.
2. Riparian vegetation removal will be kept to the minimum necessary for the demolition of the old bridge and the construction of the new bridge.
3. A silt screen will be installed prior to and remain intact and functional during all in-water construction to prevent sediment drift. Silt screens must not inhibit the upstream or downstream movement of aquatic wildlife.
4. Disturbance within Dry Creek will be kept to a minimum during construction activities and will only occur within designated areas.
5. If a water diversion will be utilized in Dry Creek it must be in place between July 1 and October 31. The clear water diversion must not inhibit the upstream or downstream movement of aquatic wildlife.
6. A biological monitor will be on-site prior to and during the installation and removal of the water diversion. The qualified biologist must possess a vast knowledge on salmonid life history. No fish relocations will occur.
7. An erosion control plan (ECP) that incorporates erosion BMPs shall be created and implemented prior to the wet season (October 15 – April 1) to avoid sediment runoff from entering waters of the U.S. Applicable BMPs will include permanent and temporary erosion control measures, such as straw bales, mulch or wattles, silt fencing, filter fabric, spill remediation material such as absorbent booms, and/or a native fast growing seed mix as prescribed in the ECP and stormwater pollution prevention plan (SWPPP). BMPs shall be implemented that are necessary to minimize the risk of sedimentation, turbidity, and hazardous material spills.
8. All fueling and/or equipment maintenance shall occur 250 feet from all water bodies and riparian areas, except for pile drivers or other stationary equipment, and a spill prevention plan (SPP) will be created and implemented if a spill or equipment leak occurs during construction activities. Any spill within the active channel of Dry Creek will be reported to NMFS, CDFW and other appropriate resource agencies within 24 hours. Spill prevention measures will include stockpiling absorbent booms, staging hazardous materials at least 25 feet away from the river, and maintaining and checking construction equipment to prevent fuel and lubrication leaks. SWPPP measures will utilize applicable BMPs such as use of silt fences, straw bales, other methods necessary to minimize storm water discharge associated with construction activities.
9. Portions of the streambed of Dry Creek disturbed by construction activities will be restored to a pre-construction condition to the greatest extent practicable.
10. Through the development and implementation of a Riparian Restoration Plan the banks of Dry Creek and all upland areas will be revegetated and seeded using a native plant and seed mix at the end of the construction. The plan will be required to be submitted to NMFS for review and

approval and will include measures such as a watering and monitoring schedule, reporting and corrective action conditions.

Description of the Action Area

The action area is defined in the Endangered Species Act (ESA) regulations (50 CFR 402.02) as the area within which all direct and indirect effects of the Project will occur.

For the proposed Project, the action area includes the entire Project boundary (5.55 acres) along Waldo Road and extends 700 feet downstream from the Project boundary limits in Dry Creek (**Figure 1**). Dry Creek, a tributary of the Bear River in the Feather River basin, flows approximately 19 miles southwest from its headwaters in the Sierra Nevada foothills in Nevada County, through Yuba County, where it eventually confluences with the Bear River along the Sutter County line east of Plumas Lake. Land use along Dry Creek includes agriculture, the Beale Air Force Base (BAFB), and the Spenceville Wildlife Area. The Project site is located within the Spenceville Wildlife Area. Dry Creek, within the Project boundary where direct effects will occur, features a slow moving, shallow pool approximately 100-ft wide with a fine (i.e. sand/silt) uniform substrate not ideal for salmonid spawning, but is suitable for juvenile rearing. Direct effects created by the Project include riparian vegetation removal and added shade from the construction of a larger profile bridge. Valley foothill riparian habitat occurs on both sides of Dry Creek within the action area, providing suitable shaded habitat within the water along the creek that is necessary for juvenile salmonid rearing aiding in protection from predators and thermoregulation. Outside of the Project boundary, but within the action area where indirect effects will occur, Dry Creek features a riffle with fast moving water and a gravel substrate, typically ideal for salmonid spawning. Beyond the riffle to the furthest extend downstream within the action area is a run which features fast moving water and a mostly gravelly substrate that may also be used for salmonid spawning if oxygen levels in the water are sufficient. Riffles and runs primarily differ in their gradient, with a riffle producing the highest dissolved oxygen concentration. Indirect effects created by the Project include sediment drift from the Project site as a result of bridge demolition and construction, the installation of a temporary work pad, etc. Sediment drift can be detrimental to salmonid egg incubation, as sediment accumulation on a redd, the area where salmonids spawn and lay their eggs, can suffocate and kill salmonid eggs (Jensen 2009).

Anadromous salmonids, including California Central Valley steelhead DPS (*O. mykiss pop.11*) and Central Valley Fall/Late-Fall-Run Chinook salmon ESA (*O. tshawytscha pop.13*), are known historically to utilize Dry Creek for spawning and juvenile rearing. Like most anadromous waterways, the upper reaches of the system nearest to the headwaters provide the most ideal spawning conditions for salmonids due to the cold-water temperatures necessary for egg incubation. However, for many years fish passage was blocked at the Beale Lake Dam, constructed in 1942 along Dry Creek within the BAFB. The dam created an approximate 2.5-acre lake located approximately 1.8 miles downstream from the Project site. The Beale Lake Dam had fully blocked fish passage from its construction in 1942 through the 1980's, until it was determined that a concrete fish ladder needed to be constructed to maintain fish passage. The fish ladder was only marginally successful due to its size, and the decision between USAF and United States Fish and Wildlife Service (USFWS) was ultimately made to fully remove the dam in 2020, to restore anadromous salmonid passage to the upper reaches of Dry Creek.

Since the removal of the Beale Lake Dam, Environmental DNA (eDNA) samples collected on March 29, 2021 at 17 sampling locations along an approximate 4.3 mile stretch of Dry Creek, with eight (8) of the 17 samples being collected upstream of the Project site, had all yielded positive results for *O. mykiss,* though eDNA sampling cannot directly confirm whether the sample is from the anadromous *O. mykiss pop.11* or simply a resident *O. mykiss* (Harvey 2021). During a snorkel survey in late-May 2024, one (1) of three (3)

1:2,400

0 25 50 Feet

NORTH

Data Sources: ESRI, Yuba County, Dokken Engineering, NAIP 2022

Waldo Road over Dry Creek Bridge Replacement Project
Action Area
Figure 1

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GE: #18-096 Map Date: 08/08/2025

O. mykiss observed lacked an adipose fin, consistent with the fish having hatchery origins (CFS 2024). This observation confirms that *O. mykiss pop.11* can utilize Dry Creek as juvenile rearing habitat. Both hatchery and natural origin *O. mykiss* from the Feather River basin are considered part of *O. mykiss pop.11* (NOAA 2006). Additionally, though limited, suitable spawning substrates have been identified throughout Dry Creek, notably where spawning gravel was introduced downstream of the Project site in December 2023 (CFS 2024). Though not detected during snorkel surveys or eDNA sampling, there have been historical observations of *O. tshawytscha* in Dry Creek, specifically *O. tshawytscha pop.13* which are not an ESA-listed species. Central Valley Spring-Run Chinook salmon ESU (*O. tshawytscha pop.11*) is listed as threatened under the federal ESA, however, *O. tshawytscha pop.11* have never been documented utilizing Dry Creek. The absence of *O. tshawytscha pop.11* can be attributed to unsuitable environmental conditions associated with their life history.

The potential for listed salmonid presence within the action area can be inferred by environmental factors and the time of year. Critical temperature for salmonids and salmonid eggs refer to when the water temperatures begin to cause significant stress and fitness to the fish and eggs. Generally, the critical temperature threshold for salmonid egg incubation is 55^0F and the threshold for salmonid survival overall is 68^0F (USDI 2023). Water temperatures above these thresholds are detrimental to salmonid survival, thus an analysis on historic environmental conditions within Dry Creek can help determine when and where listed salmonids may be throughout the waterway and at what times of year. Water quality data collected by USFWS from 2015 to 2016, as part of the Dry Creek/Best Slough Baseline Habitat Assessment, and by Sierra Streams Institute (SSI) from 2022 to 2025, as part of their ongoing Dry Creek Riparian Restoration Management Project, confirm that water temperatures during the time of year *O. mykiss pop.11* spawn; typically mid-December through May, peaking in mid-March depending on the yearly environmental conditions; historically fall within the optimal temperature range for egg incubation and embryo survival throughout Dry Creek (USFWS 2016). *O. tshawytscha pop.11* typically spawn from mid-August to mid-October, peaking in mid-September depending on the yearly environmental conditions, with adults initially entering their natal river systems (i.e. Sacramento River Basin) in the spring and holding in cool-water pools throughout the river system through the late spring and summer months. Dry Creek does not provide the necessary water temperatures suitable for adult *O. tshawytscha pop.11* holding or spawning, as average water temperatures in Dry Creek during the typical *O. tshawytscha pop.11* spawning period are consistently higher than 60^0 F.

ESA-Listed Species and Critical Habitat in the Action Area

Based on our analysis of the likelihood for ESA-listed species to occur within the action area we have made effect determinations shown in **Table 1** below. The proposed actions do not occur in designated critical habitat for NOAA Fisheries listed species.

Table 1. ESA-listed Species in the Action Area and Effect Determination(s)

Species	ESA Listing Status	Recovery Plan/Date	Effect Determination
California Central Valley Steelhead	Threatened. January 5, 2006.	N/A	NLAA
Central Valley Spring-run Chinook Salmon	Threatened. June 28, 2005.	2014	NE

*Note: **NLAA** = may affect, not likely to adversely affect; **LAA** = likely to adversely affect; **NE** = no effect (not present in the action area)*

Effects of the Action on ESA-Listed Species

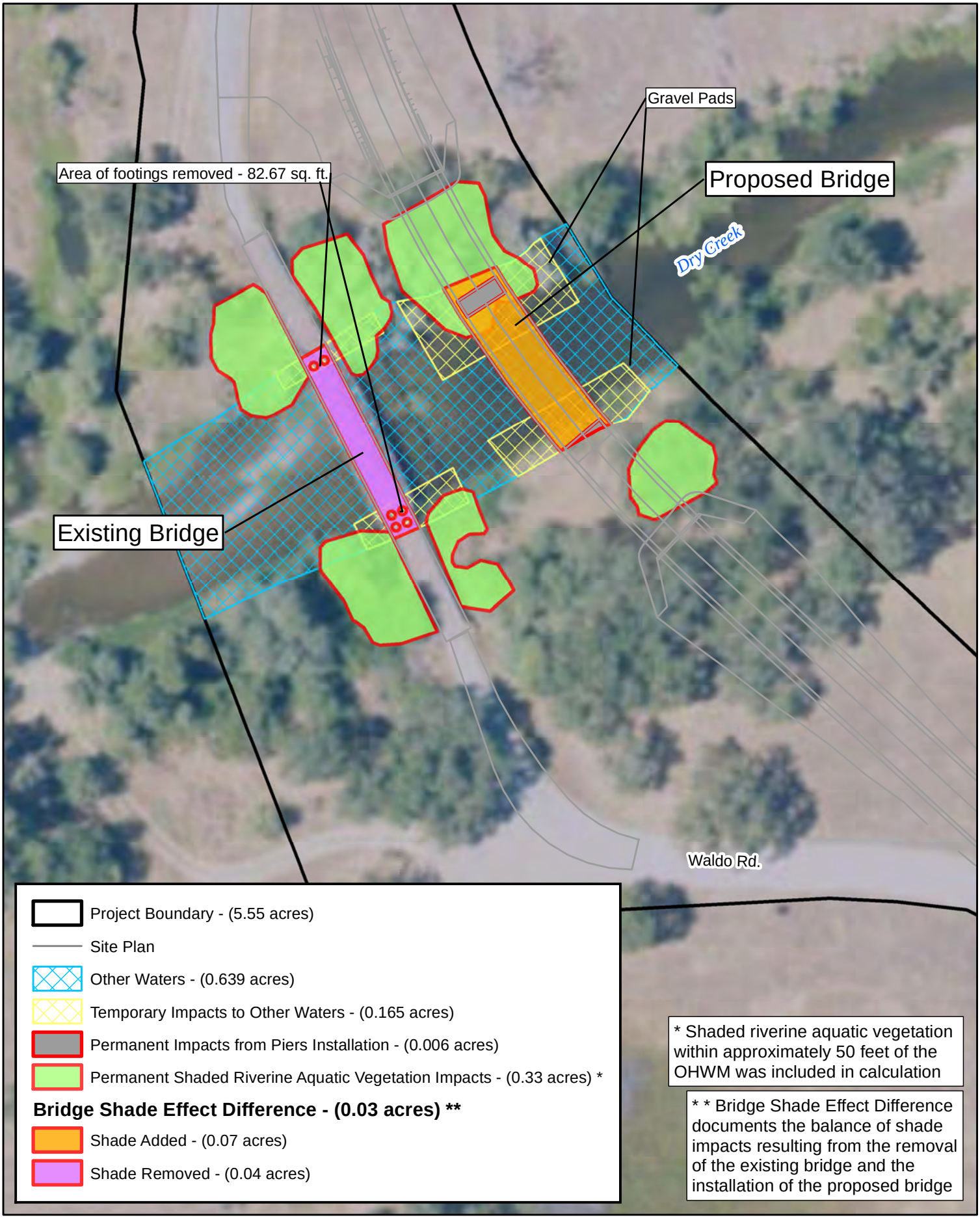
California Central Valley steelhead DPS (*O. mykiss pop.11*) has the potential to occur within the action area based on observances of *O. mykiss* individuals identified during snorkel surveys and positive detections of *O. mykiss* through Environmental DNA (eDNA) sampling. Central Valley Spring-Run Chinook salmon ESU (*O. tshawytscha pop.11*) have never been documented in Dry Creek and can be explained by the environmental factors within Dry Creek during the times of year that *O. tshawytscha pop.11* are known to migrate and spawn.

O. mykiss pop.11 typically spawn from mid-December through May, peaking in mid-March, and egg incubation will occur from mid-December through July, both spawning and incubating dependent on the local environmental conditions within the natal tributary. In Dry Creek specifically, the ideal conditions for spawning and egg incubation based on the water quality data collected by USFWS and SSI would likely be from mid-December through mid-April. Average temperatures from mid-April through July would far exceed the 55^0F critical temperature for salmonid egg survival. Once the fry emerge, juvenile rearing within Dry Creek, specifically the action area where water depth is shallow likely resulting in above average water temperatures, likely occurs through mid-June before the average temperatures exceed the 68^0F critical temperature for salmonid survival. At this point, it is likely that *O. mykiss pop.11* juveniles would move downstream to larger tributaries where cooler water temperatures are more likely to be found. Adult *O. mykiss pop.11* migration typically begins in mid-July, where they enter the lower reaches of the Sacramento River basin, holding in larger tributaries with suitable water temperatures, until their natal tributaries (i.e. Dry Creek) fall within the necessary temperature thresholds for survival. Based on water quality data, adult *O. mykiss pop.11* could begin their migration up Dry Creek as early as October and hold in pools along the waterway until spawning in mid-December when temperatures are in the range for egg incubation.

Based on this analysis, *O. mykiss pop.11* of any life stage would not be expected to occur within the action area definitively from July through September, with the possibility of adult migration or juvenile emigration beginning in October, should the conditions be conducive to such movement. Project effects on *O. mykiss pop.11* would include the removal of riparian vegetation along Dry Creek, added shade from the construction of a larger profile bridge, and increased turbidity during in-water work.

Riparian vegetation removal, specifically vegetation/trees within 50 feet of the OHWM, affects the sun exposure along the waterway which can be detrimental to salmonids. Shade from riparian vegetation regulated water temperature, which is a key factor in juvenile salmonid survival while rearing. Regulated water temperatures from riparian vegetation shade within a waterway increases the growth and survival of aquatic vegetation and invertebrates as well, that provide cover and forage from growing salmonids.

Added shade from the construction of the new Waldo Road bridge which features a larger profile than the old bridge, can also be detrimental to salmonids. The new bridge construction will create approximately 0.07 acres of shade over Dry Creek, while the demolition of the old bridge will remove 0.04 acres of shade over Dry Creek, thus results in 0.03 acres of shade added from a bridge/man-made structure over Dry Creek **(Figure 2**). Shade created by bridges can affect the upstream and downstream movement of salmonids and increase the risk of predation due to changes in light exposure in more vulnerable areas of a waterway where predators may lay and wait to ambush prey.



NORTH

1:800

0 25 50 Feet

Data Sources: ESRI, Yuba County, Dewberry Engineering, NAIP 2022

Waldo Road over Dry Creek Bridge Replacement Project
Impacts to Essential Fish Habitat
Figure 2

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GE: #18-096 Date: 12/17/2025

Increases in turbidity can be indirectly detrimental to *O. mykiss pop.11*, should the turbidity plumes and sediment drift occur during the time of year *O. mykiss pop.11* egg incubation occurs. As discussed previously, in-water construction will only occur outside of the spawning and egg incubation time frames for *O. mykiss pop.11*, though rain events could mobilize sediment from the Project site into Dry Creek should a lack of stormwater best management practices (BMP's) be implemented prior to such events during construction or outside of the construction season. Sediment drift can be detrimental to *O. mykiss pop.11* egg incubation, as sediment accumulation on a redd, the area where salmonids spawn and lay their eggs, can suffocate and kill salmonid eggs.

Effect Determination: The Project "may effect but is not likely to adversely affect" *O. mykiss pop.11* with the implementation of the avoidance and minimization measures listed above in "Avoidance and Minimization Efforts" section.

Effects of the Action on Essential Fish Habitat

Despite not providing suitable habitat for *O. tshawytscha pop.11,* Dry Creek is considered Chinook salmon EFH under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and is known to support a population of *O. tshawytscha pop.13.* Project effects on Chinook salmon EFH include the removal of riparian vegetation along Dry Creek, added shade from the construction of a larger profile bridge, and increased turbidity during in-water work, much like effects described above in the "Effects of the Action on ESA-Listed Species" section.

Riparian vegetation removal, specifically vegetation/trees within 50 feet of the OHWM, affects the sun exposure along the waterway which can be detrimental to salmonids. Shade from riparian vegetation regulated water temperature, which is a key factor in juvenile salmonid survival while rearing. Regulated water temperatures from riparian vegetation shade within a waterway increases the growth and survival of aquatic vegetation and invertebrates as well, that provide cover and forage from growing salmonids.

Added shade from the construction of the new Waldo Road bridge which features a larger profile than the old bridge, can also be detrimental to salmonids. The new bridge construction will create approximately 0.07 acres of shade over Dry Creek, while the demolition of the old bridge will remove 0.04 acres of shade over Dry Creek, thus results in 0.03 acres of shade added from a bridge/man-made structure over Dry Creek. Shade created by bridges can affect the upstream and downstream movement of salmonids and increase the risk of predation due to changes in light exposure in more vulnerable areas of a waterway where predators may lay and wait to ambush prey.

A temporary water diversion structure will be installed in the vicinity of the new Waldo Road Bridge to provide a working area to establish two (2) in-channel piers. The temporary water diversion will be constructed by placing a shoring system (likely comprised of a K-rail) and pushing clean river gravel into Dry Creek from the banks while leaving an approximately 40-foot-wide opening for water to move through the site. Upon completion it is expected that the clean river gravel will be removed to the greatest extent possible by extracting material from the center of the pad and then leaving the outer ring of gravel at the end of construction to provide habitat for aquatic organisms. This activity will result in approximately 0.124 acres of temporary fill of Chinook salmon EFH and increases in turbidity as a result of the installation and removal of the gravel material.

Temporary pads of gravel will also be installed at the abutments of the existing bridge in order to facilitate equipment access in support of dismantling and removal of the bridge. This activity will result in approximately 0.041 acres of temporary fill of Chinook salmon EFH and increases in turbidity as a result of the installation and removal of the gravel material.

Increases in turbidity can be indirectly detrimental to Chinook salmon EFH, should the turbidity plumes and sediment drift occur during the time of year salmonid egg incubation occurs. As discussed previously, in-water construction will only occur outside of the spawning and egg incubation time frames for all salmonid species, listed and not listed, that utilize Dry Creek.

The establishment of the two in-water piers for the new bridge will result in 0.006 acres of permanent impacts to Chinook salmon EFH, while the removal of the footings of the existing bridge will result in an increase of approximately 0.002 acres of Chinook salmonid EFH for a total loss of approximately 0.004 acres of Chinook Salmonid EFH.

Effect Determination: The Project "may effect but is not likely to adversely affect" Chinook salmon EFH with the implementation of the avoidance and minimization measures listed above in "Avoidance and Minimization Efforts" section.

Conclusion

Based on the analysis that all effects of the proposed Project will be insignificant or highly unlikely, we have determined that the proposed Project "may effect but is not likely to adversely affect" *O. mykiss pop.11* and Chinook salmon EFH.

Sincerely,

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