SPBL-2025-01

# SESPE CREEK OVERFLOW RAILROAD BRIDGE REPAIR

## **EXHIBIT C**
## REGULATORY PERMITS

The project is subject to the following regulatory permits:
Section 401
Section 404
Lake and Streambed Alteration Agreement

SPBL-2025-01

# SESPE CREEK OVERFLOW RAILROAD BRIDGE REPAIR

## **EXHIBIT D**
## BIOLOGICAL RESOURCES ASSESSMENT AND JURISDICTIONAL DELINEATION REPORT

# Biological Resources Assessment and Jurisdictional Delineation Report

*Ventura County Transportation Commission's Santa Paula Branch Line Sespe Creek Overflow Railroad Bridge Repair Project*

October 2024


VCTC Sespe Creek Bridge Emergency Repair Project

| | |
|---|---|
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## Contents

## *List of Acronyms*

| | |
|---|---|
| ACOE | United States Army Corps of Engineers |
| BCC | Birds of Conservation Concern |
| Camp Pendleton | United States Marine Corps Base Camp Pendleton |
| CDFG | California Department of Fish and Game |
| CEQA | California Environmental Quality Act |
| CESA | California Endangered Species Act |
| FGC | California Fish and Game Code |
| CNDDB | California Natural Diversity Database |
| CNPS | California Native Plant Society |
| CPUC | California Public Utilities Commission |
| CSS | coastal sage scrub |
| CWA | Clean Water Act |
| FE | federally endangered |
| FESA | Federal Endangered Species Act |
| FT | federally threatened |
| FP | fully protected |
| FWCA | Fish and Wildlife Conservation Act of 1980 |
| GIS | Geographic Information Systems |
| GPS | Global Positioning System |
| HCP | Habitat Conservation Plan |
| LSAA | Lake or Streambed Alteration Agreement |
| Manual | 1987 Wetland Delineation Manual |
| MBTA | Migratory Bird Treaty Act |
| msl | Mean Sea Level |
| NMFS | National Marine Fisheries Service |
| NRCS | Natural Resources Conservation Service |
| NWI | National Wetlands Inventory |
| OHWM | ordinary high water mark |
| ROW | right-of-way |
| RWQCB | Regional Water Quality Control Board |
| SE | state endangered |
| SSC | Species of Special Concern |
| ST | state threatened |
| VCTC | Ventura County Transportation Commission |
| USDA | United States Department of Agriculture |

# Introduction

On January 10, 2023, following a series of large storms that produced extreme sediment and debris ladened flows, three span bents were washed out on the western end of the bridge. The rail and attached rail ties were left suspended between the abutment and the 4th bent, leaving the bridge and rail line out of service. In addition to this initial damage, subsequent atmospheric river storms during the winter of 2023-2024 resulted in additional damage to the west railroad bridge abutment culminating in significant erosion behind the west abutment of the bridge. These events were also declared a Federal disaster on April 13, 2024 (DR-4769-CA). The concentrated channel flows resulting from the 2023-2024 storms have pushed the north bank and has now eroded behind the abutment. VCTC has completed emergency erosion protection measures under regional emergency repair permitting in order to prevent further damage during the 2024-2025 storm season.

The Santa Paula Branch Line (SPBL) runs for 32 miles from the East Ventura / Montalvo train station, through the Cities of Ventura, Santa Paula, and Fillmore, to the unincorporated community of Piru, with 29 miles of active track. Originally built in 1887 by the Southern Pacific railroad, the SPBL remains an active short line railroad with freight, tourist and excursion, film and television, and research and development rail operations (VCTC 2023).

The storms and subsequent flooding and damage were declared an emergency in the State of California. On January 14, 2023, the President of the United States disaster declaration for the California Severe Winter Storms, Flooding, Landslides, and Mudslides (DR-4683-CA). Ventura County Transportation Commission (VCTC) has requested Federal Emergency Management Agency (FEMA) funding to compensate for the structure repair.

HDR has prepared this Biological Resources Assessment (BRA) report for the proposed Bridge Repair project (Project) in support of regulatory permitting of the bridge repair/replacement. The purpose of the BRA survey was to address potential effects of the Project on designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA), as well as any species otherwise designated as sensitive by the California Department of Fish and Wildlife (CDFW) and/or the California Native Plant Society (CNPS).

The Project Area was assessed for sensitive species known to occur locally. Attention was focused on those state and/or federally listed as threatened or endangered species and California Fully Protected species that have been documented in the vicinity of the Project Area, whose habitat requirements are present within or adjacent to the Project Area. Results of the habitat assessment are intended to provide sufficient baseline information to the Project Proponent (VCTC) and, if required, to City, County or other local government planning officials and federal and state regulatory agencies, including the U.S. Fish and Wildlife Service (USFWS) and CDFW, respectively, to determine if the Project is likely to result in any adverse

effects on sensitive biological resources and to identify mitigation measures to offset those effects.

In addition to the BRA survey, the Project Area was assessed for the presence of state and/or federal jurisdictional aquatic resources potentially subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under Section 401/WDR of the CWA/Porter Cologne Water Quality Control Act, and CDFW under Section 1602 of the California Fish and Game Code (FGC), respectively (see Appendix B for regulatory framework discussion).

## Project Description

The Project involves the repair of the VCTC Santa Paula Branch Line (SPBL) Rail Bridge at Mile Post 423.44 over Sespe Creek Overflow. The Rail Bridge over Sespe Creek Overflow was damaged by the catastrophic storms during the winter of 2022-2023. The bridge consists of 15 spans spaced 29.83-feet apart for a total bridge length of 450-feet. The abutment, and three spans and two bents have been damaged beyond repair or washed out on the western end of the bridge. The rail and attached rail ties were left suspended between the abutment and the 4th bent, leaving this rail line out of service. The Project includes reconstruction of the bridge to pre-disaster capacity, and function to restore rail service (Figure 1-1).

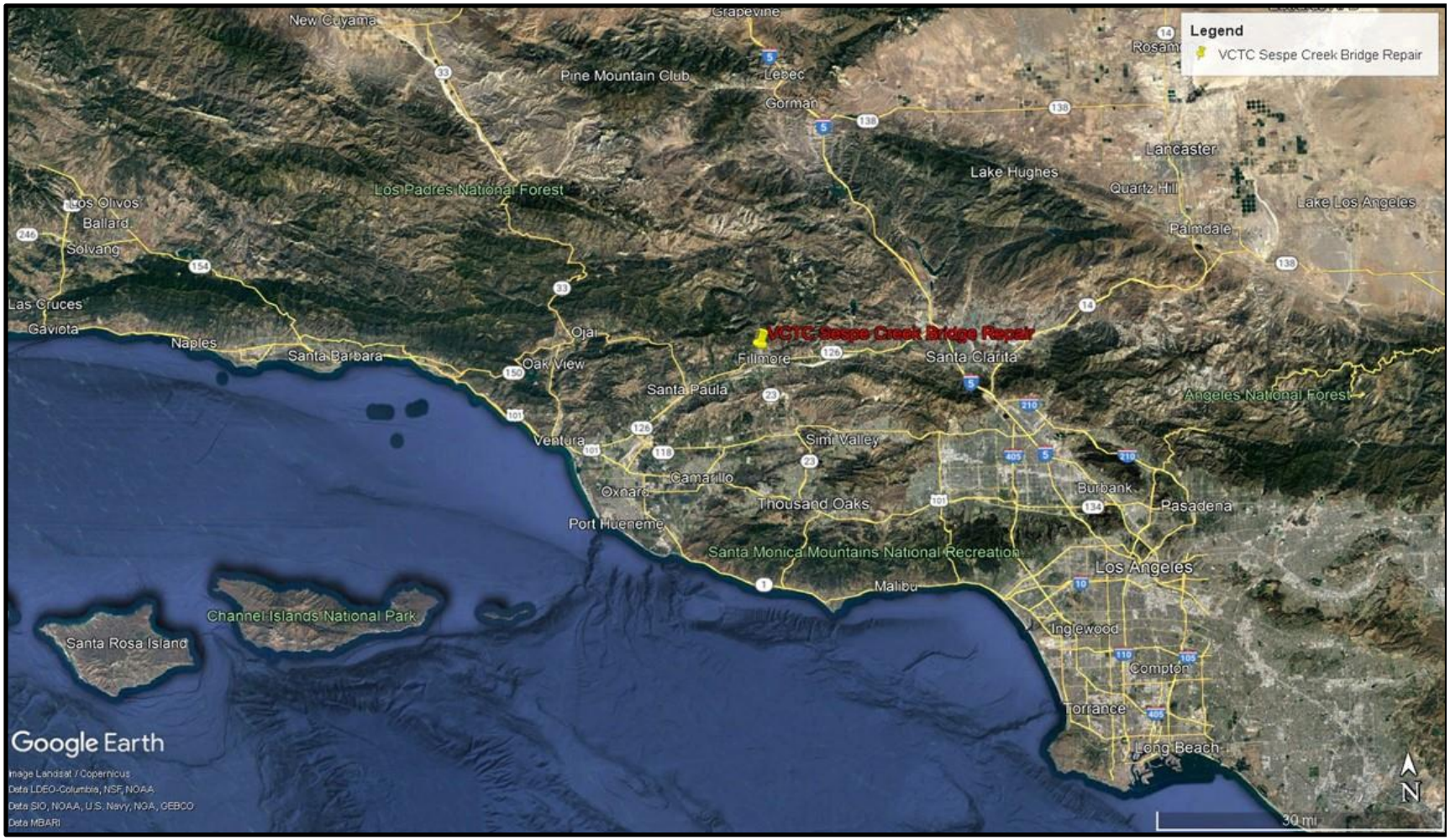
The project proponent proposes replace the abutment and the three destroyed spans with a new abutment and two new 49-foot spans. This will require the construction of two bents with pier caps, and a new abutment with wingwalls. Erosion protection for the wingwalls will be required.

The new proposed bent will be parallel to the flow of water and each bent is comprised of two cast-in-drilled-hole (CIDH) piles. The cast in drilled hole methodology does not require dewatering the hole, however, containment of displaced water and concrete slurry will be required. Further, the construction of the bridge bents will require diverting the flows away from the work area. The project is proposing to push the low flows to the other side of the channel outside of the construction areas during construction.

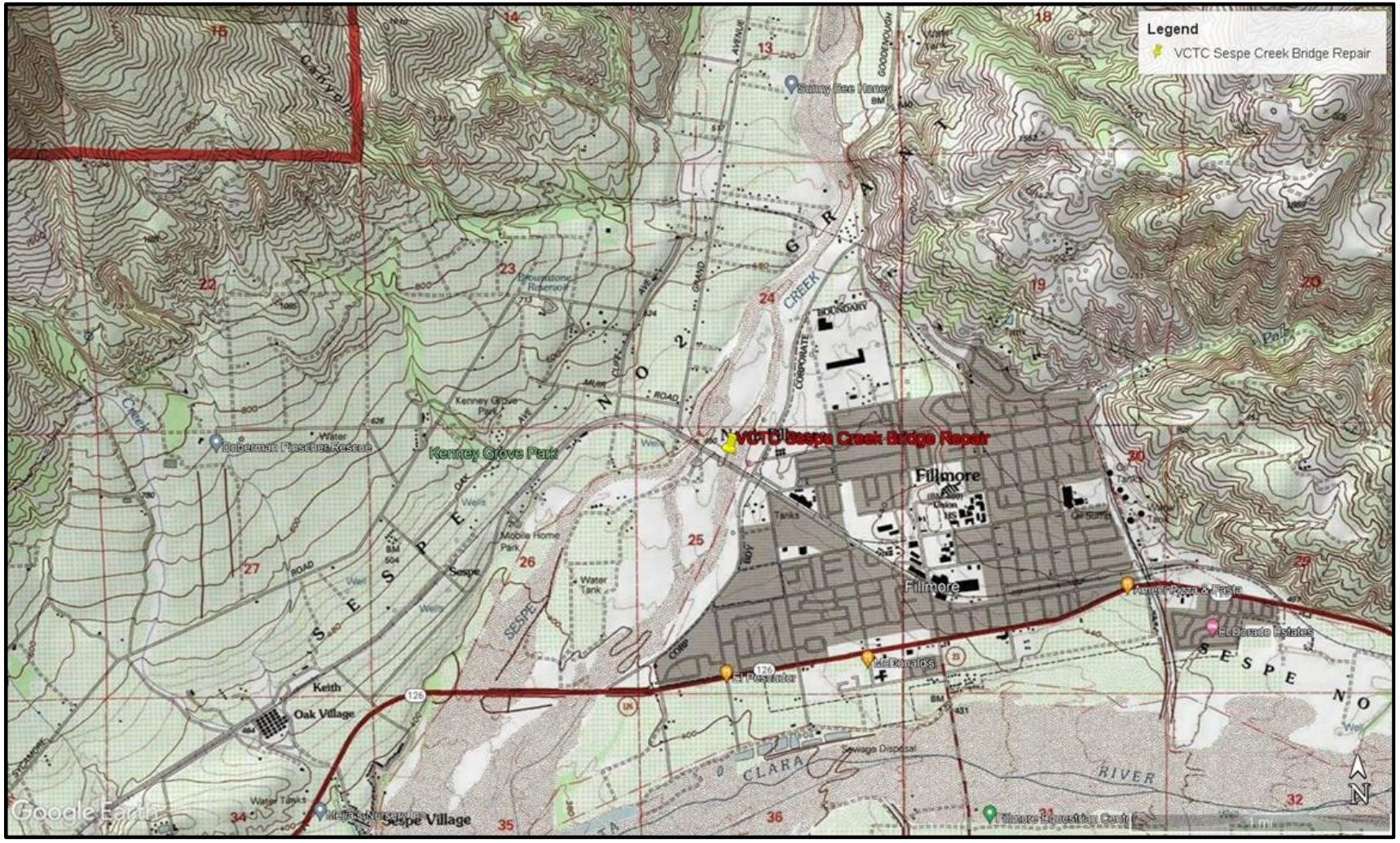
## Location

The bridge is generally located in the northern portion of Lot 2 of Section 25 of Township 4 North, Range 20 West (San Bernardino Base Meridian), in unincorporated Ventura County, California just west of the City of Fillmore (Figures 1-2 and 1-3). The Project Area is depicted on the Fillmore U.S. Geological Survey's (USGS) 7.5-Minute Series Quadrangle map. Specifically, the Project is located on the Ventura County Transportation Commission's (VCTC) Santa Paula Branch Line (SPBL) Rail Bridge (Mile Post 423.44) over Sespe Creek Overflow (Longitude 34.406284, Latitude -118.931914) within Assessor's Parcel Number (APN): 046-001-030

parallel to Old Telegraph Road approximately 1,100 feet northwest of Goodenough Road (Figures 1-3 and 1-4).




**Regional Location Map**
VCTC Sespe Creek Bridge Repair Project
**FIGURE 1-1**




**USGS Topographic Site Location Map**
VCTC Sespe Creek Bridge Repair Project
**FIGURE 1-2**


**Aerial Photograph of Project Area**
VCTC Sespe Creek Bridge Repair Project
**FIGURE 1-3**


SOURCE: USDA NRCS Soils Mapper

**Soils of Project Area**
VCTC Sespe Creek Bridge Repair Project
Source NRCS Soil Survey
**FIGURE 1-4**

## Environmental Setting

The Project Area lies in the geographically based ecological classification known as the Oxnard Plain and Valleys of the Southern California/Northern Baja Coast Level 3 ecoregion (Griffith et al. 2024). The goal of regional ecological classifications is to reduce variability based on spatial covariance in climate, geology, topography, climax vegetation, hydrology, and soils. The Oxnard Plain and Valleys ecoregion is found on nearly level floodplains and gently sloping alluvial fans and terraces in the valleys of the Santa Clara River and Calleguas Creek (Griffith et al. 2024).

The topography of the Project Area slopes downward from northwest to southeast. The elevation of the Project area ranges from approximately 450 feet above mean sea level (amsl) near the northern limits of the Project Area to 435 feet amsl near the southern limits.

The climate is a temperate, Mediterranean type, typified by warm, dry summers, and cool, moist winters. Precipitation in the Mediterranean climates of California averages 27 inches of rain with approximately 95% falling between November and April (USDA 2003). Average annual maximum temperatures within this region peak at 74.3 degrees Fahrenheit (° F) in July/August and fall to an average annual minimum temperature of 43.2° F in February. Average annual precipitation is greatest from November through March, reaching a peak in February (3.26 inches). Precipitation is lowest in the month of July (0.01 inches). Average annual total precipitation in Fillmore, California averages about 19 inches.

Hydrologically, the Project Area is situated within the Fillmore Hydrologic Sub-Area (HSA 403.31). The Fillmore HSA is located within the larger Santa Clara Watershed (HUC 18070102) with the Santa Clara River being the major hydrogeomorphic feature. The river originates in the northern slope of the San Gabriel Mountains in Los Angeles County, traverses Ventura County, and flows into the Pacific Ocean halfway between the cities of San Buenaventura and Oxnard (California Waterboard 2023).

Soils within the Project area are comprised mostly of the Anacapa series, the Corralitos series, the Garretson series, Riverwash, and Sandy alluvial land. The Anacapa series consists of deep, well drained soils that formed in alluvium derived from predominantly sedimentary rock sources. Anacapa soils are in flood plains and on alluvial fans and have slopes of 0 to 9 percent. The Corralitos series consists of deep, somewhat excessively drained soils that formed in recent sandy alluvium derived from acid sandstone and related rocks. Corralitos soils are on alluvial fans and in small valleys and have slopes of 0 to 15 percent. The Garretson series is a member of the fine-loamy, mixed, nonacid, thermic family of Typic Xerorthents. Typically, Garretson soils have brown and yellowish brown, slightly acid, gravelly very fine sandy loam and gravelly loam A horizons and yellowish brown, brown and grayish brown, slightly acid and neutral, gravelly loam C horizons. Riverwash consists of very recent depositions of gravel, sand, and silt alluvium along major stream and their tributaries. Gravel bars make up the majority of these areas. During floods, alluvial areas are subject to repeated deposition, erosion, and shifting of

transported material., Sandy Alluvial land consists of sandy and gravelly deposits along streams. Stratification is variable, and recent over-washes tend to change the texture of the surface layer from time to time.

The Project Area is located in the Santa Clara River valley and on the outside the Fillmore city limits. The City of Fillmore consists of a mix of urban landscape consisting of residential and agricultural land uses. The Project Area and corresponding rail bridge is located on the Santa Paula Branch railroad right-of-way, which is owned by VCTC and operated by lessee Sierra Northern Railwa; and is used as a multimodal corridor, including freight rail, bicycle and hiking trail, pipelines and utilities, recreational parks, and to preserve the corridor for possible future commuter rail service (VCTC 2023).

# Assessment Methodology

## Biological Resources Assessment

Literature Review

Prior to performing the biological field surveys, documentation relevant to the Proposed Project and surrounding area was reviewed, and a special status species list was prepared for the Proposed Project.

Special Status Species

A special status species list was prepared from record searches for the United States Geological Survey (USGS) 7.5-minute Filmore quadrangle within three miles of the Proposed Project. Special status species include all federally and state listed endangered and threatened species, candidates for listing, species proposed for listing, FP species, SSC species, species listed as rare or endangered by CNDDB, and special status species that are identified under U.S. Fish and Wildlife Service IPac Report that had ranges within Ventura County.

A sensitive species was considered a potential inhabitant of the Proposed Project, if its known geographical distribution either encompassed part of the Proposed Project or was within the vicinity of the Proposed Project (within approximately three miles), and its general habitat requirements (e.g., roosting, nesting, or foraging habitat, specific soil type, permanent water source) were within the boundaries of the Proposed Project. Sources of information that were used to compile the species list included the CDFW California Natural Diversity Data Base (CNDDB, 2024), the CNPS online inventory (CNPS, 2024), and the USFWS IPac Report. A complete list of species assessed is included as Appendix A, CNDDB, IPac, and CNPS Special Status Species Table.

Critical Habitat

The USFWS critical habitat areas for listed species were searched using Geographic Information Systems (GIS) shape files provided by the USFWS within three miles of the Proposed Project alignment.

Channels and Other Water Features

The potential presence of channels, drainages and other water resources was assessed by reviewing USGS topographic maps to identify any blue line streams (USGS, 1975,1981,1995, 1997), searching the USFWS National Wetlands Inventory (NWI) (USFWS, 2024), and by reviewing recent aerial images of the Proposed Project (Google, 2024).

Soils

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) online Soil Survey (NRCS, 2024) was used to assess soils mapped along the Proposed Project alignment, and GIS data was used to create a map.

**Biological Resources Assessment Field Survey**

Data regarding biological resources in the Project Area were obtained through literature review, desktop evaluation, and field investigation. Prior to performing the field survey, available databases, and documentation relevant to the Project Area were reviewed for documented occurrences of sensitive species that could potentially occur in the vicinity of the Project. The USFWS Information for Planning and Consultation (IPaC) Online System (USFWS 2024) and the most recent versions of the California Natural Diversity Database (CNDDB) RareFind program (CDFW 2024) and California Native Plant Society (CNPS) Rare Plant Inventory (CNPS 2024) databases were searched for sensitive species data in the Fillmore USGS 7.5-minute Series Quadrangle. These databases contain records of reported occurrences of state and federally listed species or otherwise sensitive species and habitats that may occur within the vicinity of the Project area (within approximately 3 miles). Other available technical information on the biological resources of the area was also reviewed including previous surveys and recent findings. Additional resources reviewed include current and historic aerial imagery (Google Earth 2024), U.S. and USDA NRCS Soil Mapping (USDA NRCS 2024).

HDR Biologist Lisa Patterson conducted a biological resources assessment of the Project Area on April 5, and June 4, 2024. Wildlife species were detected during field surveys by sight, calls, tracks, scat, and/or other sign. In addition to species observed, expected wildlife usage of the site was determined based on known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species survey was to identify potential habitat for special status wildlife that may occur within the Project vicinity. Suitable habitat for special status species was determined by the presence of diagnostic habitat elements, including but not limited to appropriate vegetation communities. The assessment surveys determined which wildlife or plant species were present, had the potential to occur, or would require USFWS or CDFW protocol-level surveys. Animal species were either observed directly, with the aid of binoculars, or detected from calls, tracks, scat, or other sign.

Wildlife Surveys

Habitat within the Project Area has marginal characteristics to provide habitat for one or more of the special status species known to occur or with the potential to occur in the Proposed Project area. Although the region provides habitat for a number of federally endangered (FE), federally threatened (FT), state endangered (SE), and state threatened (ST) species, however suitable habitat is present for the candidate southwestern pond turtle known to occur withing the Project Area. Although there is potential habitat is present for southern steelhead; a run has not been recorded recently, and they are not likely to occur in the Project Area. No additional focused surveys are warranted.

## Jurisdictional Delineation

The Project area was evaluated for the presence of riverine/riparian/wetland habitat and jurisdictional waters, i.e. Waters of the U.S. (WOTUS), as regulated by the USACE and RWQCB, and/or jurisdictional streambed and associated riparian habitat as regulated by the CDFW. Prior to the field visit, aerial photographs of the Project Area were viewed and compared with the surrounding USGS 7.5-Minute Topographic Quadrangle maps to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program "My Waters" Google Earth Pro data layers were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS) "Web Soil Survey" was reviewed for soil types found within the Project Area to identify the soil series in the area and to check these soils to determine whether they are regionally identified as hydric soils. Upstream and downstream connectivity of waterways (if present) were reviewed on Google Earth Pro aerial photographs and topographic maps to determine jurisdictional status. The lateral extent of potential USACE jurisdiction was measured at the Ordinary High Water Mark (OHWM) in accordance with regulations set forth in 33CFR part 328 and the USACE guidance documents listed below:

- *USACE – Corps of Engineers Wetlands Delineation Manual, Wetlands Research Program Technical Report Y-87-1 (on-line edition), January 1987 - Final Report.*
- *USACE – Jurisdictional Determination Form Instructional Guidebook (JD Form Guidebook), May 30, 2007.*
- *USACE – A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (A Delineation Manual), August 2008.*
- *USACE – Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), September 2008.*
- *USACE – Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (Minimum Standards), January 2024.*
- *The Environmental Protection Agency (EPA) and the Department of the Army's "Navigable Waters Protection Rule: Definition of 'Waters of the United States,'" April 21, 2020 (effective June 22, 2020) (85 FR 22250).*

Evaluation of CDFW jurisdiction followed guidance in the Fish and Game Code and *A Review of Stream Processes and Forms in Dryland Watersheds* (CDFW, 2010). Specifically, CDFW jurisdiction would occur where a stream has a definite course showing evidence of where waters rise to their highest level and to the extent of associated riparian vegetation.

# Results

## Existing Biological and Physical Conditions

The Project area is located in the Santa Clara River valley and on the outside the Fillmore city limits. The rail bridge is located on the Santa Paula Branch line which is owned by VCTC and operated by Sierra Northern; is used as a multimodal corridor, including freight rail, tourist and excursing rail service, pipelines and utilities, recreational parks, and to preserve the corridor for possible future commuter rail service (VCTC 2023).

**Habitat**

The project area consists mostly of predominantly unvegetated sandy/bouldery wash. The sparce vegetation that does occur within the project area is characterized by disturbance-oriented species and invasives; and includes Cocklebur (*Xanthium spinosum*), Telegraphs weed (*Heterotheca grandiflora*), scalebroom (*Lepidospartum squamatum*), and buckwheat *(Eriogonum fasciculatum)* .

The site is relatively disturbed by day-use, encampments, litter, flood debris, and bridge debris. There are no undisturbed habitats suitable for special status species within the project area. A complete list of plant species identified within the Project Area during the floristic botanical field survey is included in Appendix C.

**Wildlife**

***Amphibians and Reptiles***

No amphibian species were observed or otherwise detected within the Project APEl during the reconnaissance-level survey, and none are expected to occur, due to the dry, upland nature of the site and absence of nearby suitable ponded resources. Reptile species observed within the Project Area during the reconnaissance-level field survey include Great Basin fence lizard (Sceloporus occidentalis longipes), southwestern pond turtle (Actinemys pallida), red-eared slider (Trachemys scripta elegans), and western side-blotched lizard (Uta stansburiana elegans).

***Birds***

Birds were the most observed wildlife group during survey and species observed or otherwise detected in the Project Area during the reconnaissance-level survey include, California scrub-jay (*Aphelocoma californica*), red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), rock pigeon (*Columba livia*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), California towhee (*Melozone crissalis*), bushtit (*Psaltriparus minimus*), and mourning dove (*Zenaida macroura)*.

***Mammals***

Identification of mammals within the Project Area was generally determined by physical evidence rather than direct visual identification. This is because 1) many of the mammal species that potentially occur onsite are nocturnal and would not have been active during the survey and 2) no small mammal trapping was performed. The only mammal species observed were domestic dog (*Canis lupis familiarus*), coyote (*Canis latrans*), California ground squirrel (*Otospermophilus beecheyi*), and brush rabbit (*Sylvilagus bachmani*).

**Special Status Species and Habitats**

According to the CNDDB and the IPaC, 3 sensitive species (9 plant species, 24 animal species and 6 sensitive habitats) have been documented in the *Fillmore and Moorpark* USGS 7.5-Minute Series Quadrangles. This list of sensitive species and habitats includes any state and/or federally listed threatened or endangered species, California Fully Protected species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. "Special Animals" is a general term that refers to all the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species." The CDFW considers the taxa on this list to be those of greatest conservation need.

Although not a state or federally listed as threatened or endangered species, burrowing owl (*Athene cunicularia* [BUOW]) is a state and federal SSC and this species is protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California FGC (FGC #3513 & #3503.5). An analysis of the likelihood for occurrence of all CNDDB sensitive species documented in the Fillmore 7.5-Minute Quadrangle and the USFWS IPaC are provided in Appendix A. This analysis considers species' range as well as documentation within the vicinity of the Project area and includes the habitat requirements for each species and the potential for their occurrence on site, based on required habitat elements and range relative to the current site conditions.

## Special Status Species

***Santa Ana sucker – Threatened (Federal)***

Historically, the Santa Ana sucker occupied upper watershed areas of the San Gabriel and San Bernardino Mountains down to the Pacific Ocean. At present, the Santa Ana sucker is found in three disjunct populations that occupy portions of the San Gabriel, Los Angeles, and Santa Ana River basins in Southern California. Listed as threatened in 2000, Santa Ana suckers experience ongoing threats including isolation, habitat loss, alteration and degradation, all of

which are associated with significant changes in the hydrology of rivers and streams (USFW 2023).

> *Findings*: Santa Ana Suckers live in small to medium size streams throughout the year in Southern California. They thrive in freshwater conditions with depths go from a few centimeters to over 1 m (3ft 3 in). The rivers they swim in are at a cool temperature (average of <22 C), with variable flow. This species typically occurs in higher reaches where there is an overstory that shades the waters areas. Due to the ephemeral nature of the flows in the project area, the shallow waters and the summer temperatures, the habitat within the project area is not suitable for this species. Further, the proposed project has been planned to work during the time period when the channel is typically dry between July and September.
>
> Therefore, this species will not be impacted by the proposed project.

***Western yellow-billed cuckoo – Threatened (Federal)/ Endangered (State)***

The breeding range of the Western yellow-billed cuckoo formerly included most of eastern North America and parts of Northern Mexico (FWS 2014). The Western yellow-billed cuckoo is thought to dwell west of the continental divide at northern latitudes and west of the Pecos River at southern latitudes. This cuckoo species is associated with riparian habitats with willow and cottonwood (Hughes 1999). The Western yellow-billed cuckoo is restricted to riparian areas, which provide cooler and more humid environments, in hot regions (USFW 2023).

> *Findings*: This species utilizes climax riparian communities for nesting and foraging. There is no suitable habitat within the project area. Therefore, this project will not impact this species.

***Southwestern willow flycatcher – Endangered (Federal) / Endangered (State)***

The southwestern willow flycatcher (Empidonax traillii extimus) is a subspecies of the willow flycatcher family. Loss and degradation of dense riparian habitats are the primary habitat threat to the flycatcher. Historically, water developments that altered flows in the rivers and streams were the primary threat. Now, with riparian areas limited and regrowth difficult due to changes in flows, fire is a significant risk to remaining habitats. Human disturbances at nesting sites may result in nest abandonment (USFW 2023).

The southwestern willow flycatcher requires dense riparian habitats with cottonwood/willow and tamarisk vegetation and microclimatic conditions that are dictated by the local surroundings. Saturated soils, standing water or nearby streams, pools, or cienegas are a component of nesting habitat that also influences the microclimate and density vegetation component. Habitat not suitable for nesting may be used for migration and foraging. Recurrent flooding and a natural hydrograph are important to withstand invading non-native species like tamarisk. The southwestern willow flycatcher is typically found below 8,500 feet of elevation.

*Findings*: This species utilizes climax riparian communities for nesting and foraging. There is no suitable habitat within the project area. Therefore, this project will not impact this species.

***Least Bell's Vireo – Endangered (Federal) / Endangered (State)***

Least Bell's vireo is a subspecies of the North American songbird Bell's vireo (Vireo bellii). Least Bell's vireo is a migratory species that spends its winters in Mexico and returns to southern California as a summer resident. Least Bell's vireo can be found in the region during breeding season which is from March to August. The decline of this species is predominately due to brood parasitism by brown-headed cowbirds (Molothrus ater) (Kus, 2002). They breed locally in willow riparian thickets with good over and understory vegetation.

Findings: This species utilizes climax riparian communities for nesting and foraging. There is no suitable habitat within the project area. Therefore, this project will not impact this species.

***Unarmored Threespine Stickleback – Endangered (Federal) / Endangered (State)***

The Unarmored Three Spine Stickleback (UTS), Gasterosteus aculeatus williamsoni is a state and federally listed endangered species and a State of California Fully Protected Species. UTS have a very limited distribution, with the southern California population represented in only three drainages; Upper Santa Clara River (extremely limited), Bouquet Creek (extremely limited) and Soledad Canyon Creek (CalFWS 2023).

Findings: This species does not occur in Sespe Creek. It prefers slow-flowing water with areas of emerging vegetation. It can be found in ditches, ponds, lakes, backwaters, quiet rivers, sheltered bays, marshes, and harbors. There is no suitable habitat within the project site. Therefore the project will not impact this species.

***California condor – Endangered (Federal) / Endangered (State)***

The California condor (Gymnogyps californianus) is state and Federally listed as endangered. Recovery efforts have played a significant role in defining management activities in the Sespe. Concerns for declines in the remaining Sespe-Sierra population led to the establishment of the 35,000-acre Sespe Condor Sanctuary in 1947. In 1976, a large portion of the Sespe drainage was designated as one of nine critical condor habitat areas under the Endangered Species Act. In the 1980s, management efforts shifted to the captive breeding-reintroduction program headed by US Fish and Wildlife Service. Reasons for the population decline included illegal collection of adults and eggs, inadvertent poisoning from livestock predator control efforts, lead poisoning from ingested lead fragments embedded in game carcasses, powerline collisions, and loss of open feeding country to development (USDA 2003).

*Findings*: This species is a scavenger of large specie carrion. The project is located in a relatively populated area of Sespe Creek, and any suitable food resources are removed for public health reasons. Therefore, it is unlikely the project area could be utilized for foraging. There are no suitable nesting resources within or in close proximity to the project area. Therefore, this project will not impact this species.

***Steelhead - southern California DPS – Endangered (Federal) / Candidate Endangered (State)***

Southern steelhead trout (Oncorhyncus mykiss), federally listed as Endangered, historically ran up Sespe Creek. There is currently a small run of southern steelhead trout that makes it to Sespe Creek during years of high stream flow. Migrating steelhead can generally navigate upstream against flows up to six feet per second and leap over four- to six-foot heights. Deep water (> half of the vertical jump) is necessary to gain the leaping momentum. Resting pools (>6") are necessary in long sections of high velocity flows. During low flows, boulder cascades, bedrock slides, and low-gradient riffles may become barriers to upstream fish movement. Steelhead may become stranded on their upstream migration if flows rapidly decline. (USDA 2003)

*Findings*: The Designated Critical Habitat (DCH) for the southern steelhead was designation in September 2005. The project area is not within DCH, however steelhead runs have historically occurred in Sespe Creek. Currently, Sespe Creek has many areas where steelhead are blocked from returning to reproduce. Only during rare events, where runoff within a watershed is sufficient to breach the sand bars that develop at the mouths of the creeks or rivers where they enter the Pacific Ocean, may runs occur.

The primary constituent elements, i.e., the physical or biological features determined by NMFS to be essential to the conservation of these salmon and steelhead populations, are:

1. Freshwater spawning sites with water quantity and quality conditions and substrate supporting spawning,

2. Freshwater rearing sites with water quantity and floodplain connectivity to form and maintain physical habitat conditions and support juvenile growth and mobility; water quality and forage supporting juvenile development; and natural cover such as shade, submerged and overhanging large wood, log jams and beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

3. Freshwater migration corridors free of obstruction with water quantity and quality conditions and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, side channels, and undercut banks supporting juvenile and adult mobility and survival.

4. Estuarine areas free of obstruction with water quality, water quantity, and salinity conditions supporting juvenile and adult physiological transitions between fresh- and saltwater; natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels; and juvenile and adult forage, including aquatic invertebrates and fishes, supporting growth and maturation.

5. Nearshore marine areas free of obstruction with water quality and quantity conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation; and natural cover such as submerged and overhanging large wood, aquatic vegetation, large rocks and boulders, and side channels.

6. Offshore marine areas with water quality conditions and forage, including aquatic invertebrates and fishes, supporting growth and maturation.

It is only after flows breach the sand bar and extend up to the spawning areas, that the fish are able to spawn. No evidence of sufficient surface stream flow was observed within the project area. Further, the proposed project proposes to move the flows to outside the work area. They project proposes to maintain these flows as an unobstructed natural channel. Initial diversion of the channel will be restricted to April through October. Therefore, any potential to affect the steelhead will be avoided. Currently the channel bottom is generally flat and characterized by unvegetated sandy, cobbly, and rocky bottom. Each season, when work ceased in the channel, the bottom contour will be reestablished to pre-project condition. Therefore, this project will not adversely modify the habitat for this species, and no further consultation for this species is recommended.

***California Red-legged Frog (Rana draytonii) – Threatened (Federal)***

This species occurs from sea level to elevations of about 1,500 meters (5,200 feet). It has been extirpated from 70 percent of its former range and now is found primarily in coastal drainages of central California, from Marin County, California, south to northern Baja California, Mexico. This species requires aquatic breeding habitat, dispersal habitat, and upland habitat. To be considered essential breeding habitat, the aquatic feature must have the capability to hold water for a minimum of 20 weeks in all but the driest of years. This is the average amount of time needed for egg, larvae, and tadpole development and metamorphosis so that juveniles can become capable of surviving in upland habitats. California red-legged frogs usually have completed metamorphosis between July and September. Sespe Creek is characterized episodic large swift flows punctuated by low shallow flows often drying up during the summer and fall months.

*Findings*: Sespe creek does not possess suitable breeding or non-breeding aquatic habitat for this species. Therefore, this species is considered absent from the project area.

***Foothill yellow-legged frog - south coast DPS – Proposed Endangered (Federal) / Candidate Endangered (State)***

The foothill yellow-legged frog lives in foothill and mountain streams from the Pacific Coast to the western slopes of the Sierra Nevada and Cascades mountains, up to approximately 5,000 feet in elevation. The foothill yellow-legged frog occurs in a wide variety of vegetation types including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian , ponderosa pine, mixed conifer, mixed chaparral and wet meadows. The frog is closely associated with streams and is rarely observed far from the water's edge. The foothill yellow-legged frog consists of six geographically and genetically distinct population segments (DPS). The U.S. Fish and Wildlife Service listed the South Coast DPS and South Sierra DPS as endangered due to a strong pattern of declining stream occupancy, rapid reductions in occupied range and predicted inability to survive a catastrophic event (USFWS 2023).

> *Findings*: The project area is outside the elevation ranger for this species. Further, there is no suitable habitat within the project area. Therefore, this project will not impact this species.

***Bank Swallow – Threatened (State)***

The Bank Swallow is a North American member of the swallow family Hirundinidae. There are six other swallow species common to this continent. The swallow family has a world-wide distribution with most members breeding in the Northern Hemisphere and wintering in the Southern Hemisphere. The population of Bank Swallows in California currently occurs over a small portion of its historic range. The center of the current range is along the remaining natural river banks of the Sacramento and Feather rivers in the Sacramento Valley. This region supports an estimated 70 percent of the statewide population. One of the primary reasons for decline of this species is loss of habitat. (CalFWS 1992).

> *Findings*: This species does not nest in the project area. It is unlikely to forage in the project area during migration because the channel is often dry during this period. There is no suitable nesting habitat within the project area. Therefore, this project will not impact this species.

***Burrowing Owl – SSC***

The burrowing owl (BUOW) is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. According to the definition provided in the *2012 CDFG Staff Report on Burrowing Owl Mitigation*, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." BUOW spend a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. They feed primarily on insects such as grasshoppers, June beetles and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31.

> Findings: This species **was not observed during the site survey. There is no suitable nesting habitat within the active channel.** It is unlikely to forage in the project area during migration because the channel is often dry during this period. It is unlikely to forage in the project area during migration because the channel is often dry during this period. Further, surrounding areas are characterized by large trees, poles, and other purchases for burrowing owls predators. There is no suitable nesting habitat within the project area. Therefore, this project will not impact this species.

***Southwestern Pond Turtle (Actinemys pallida) - Federal Proposed Threatened***

The Southwestern Pond Turtle lives such a lavish lifestyle in California's freshwater ecosystems. In fact, this species is the only pond turtle native to California that lives in freshwater! Native to the entire American west coast, the southwestern pond turtle is most often found in southern California. The range of the western pond turtle extends from the Puget Sound lowlands in Washington through western Oregon and California, south to Baja California.

The species is found in a wide variety of aquatic habitats including rivers, streams, lakes, ponds, wetlands, reservoirs, gravel pits, stock ponds, and sewage treatment plants. Within these aquatic systems, southwestern pond turtles use areas with aquatic refugia such as emergent rocks/vegetation, undercut banks, submerged vegetation, rocks, logs, and mud (Holland 1994). For nesting sites, southwestern pond turtles have been documented nesting in upland habitat composed of coastal sage scrub, mulefat, willow woodland, non-native grassland, oak woodlands, chaparral vegetation communities, and unvegetated road banks (Pilliod et al 2013; Nerhus 2016). Distance traveled by females to and from nesting sites ranges from 17.5-585 meters (m) (Lovich and Meyer 2002; Nerhus 2016). Southwestern pond turtles that live in

seasonally inundated water systems commonly overwinter in upland habitats, while southwestern pond turtles in permanent water bodies have been documented overwintering in the water (Reese 1996; Pilliod et al. 2013). On average, southwestern pond turtles have been documented moving 175 m from their aquatic habitat to overwinter and estivate in a variety of habitat types including oak woodlands, chamise-chaparral, coastal shrub, and juniper woodland (Pilliod et al. 2013). Populations in relatively undisturbed habitats primarily feed upon benthic macroinvertebrates, while in more urban environments, southwestern pond turtles have been documented primarily feeding on red swamp crayfish (Bury 1986; Karres 2016).

> *Findings*: Southwestern pond turtles and red-eared sliders have been observed within the bridge right-of-way approximately 300 feet south of the project area. Turtles have been observed in the flowing water as well as basking on driftwood and rock on the southern end of the damaged bridge within the bridge right of way. Measures should be implemented to exclude pond turtles from the work areas during bridge reconstruction activities.

***Monarch Butterfly (Danaus plexippus) – Candidate (Federal)***

Monarchs occur on field, roadside area, open area, wet area or urban garden, milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers during breeding and migration, but they can only lay eggs on milkweed plants.

For overwintering monarchs, habitat with a specific microclimate is needed for protection from the elements, as well as moderate temperatures to avoid freezing. These conditions vary between populations. For the eastern North American population, most monarchs overwinter in oyamel fir tree roosts located in mountainous regions in central Mexico at an elevation of 2,400 to 3,600 meters. Monarchs living west of the Rocky Mountain range in North America primarily overwinter in California at sites along the Pacific Coast, roosting in eucalyptus, Monterey pines and Monterey cypress trees

> *Findings*: Sespe creek does not possess suitable breeding or non-breeding habitat for this species. Therefore, this species is considered absent from the project area.

***Crotche's Bumble Bee ( Bombus crotchii) – Candidate (State)***

Crotch's bumblebee inhabits grasslands and shrublands and requires a hotter and drier environment than other bumblebee species. It is characterized as a short-tongued species and therefore prefers certain plant species as a food source including milkweeds, dusty maidens, lupines, medics, phacelias, sages, clarkias, poppies, and wild buckwheat. Due to these habitat preferences, the Los Padres National Forest can serve as an important haven for this rapidly declining species as its climatic and dietary needs can be fulfilled throughout the forest's diverse landscape. Due to its fondness for milkweed and role as a pollinator, the Crotch's bumblebee is an important ally for another sensitive species found in the Los Padres, the Monarch butterfly.

Monarchs utilize several over-wintering sites within the Los Padres National Forest and rely exclusively on milkweed to complete their life cycle.

Like other bumblebees, Crotch's bumblebees are social insects that live in annual colonies composed of a queen, workers, and reproductives. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees.

> *Findings*: This species does not nest in the project area. It is unlikely to forage in the project area during migration because the channel is often dry during this period. There is no suitable nesting habitat within the project area. Therefore, this project will not impact this species.

**Designated Critical or Special Status Habitats**

The Project Area does not contain any sensitive habitats, including any USFWS designated Critical Habitat for any federally listed species. Critical Habitat for the federally and state listed endangered California Condor can be found approximately 2.5 miles to the north of the Project Area, Critical Habitat for the federally and state listed endangered Southwestern Willow Flycatcher can be found approximately 1.25 miles to the south of the Project Area, and Critical Habitat for the federally listed threatened Coastal California Gnatcatcher can be found approximately 5 miles to the southeast of the Project Area. However, no portion of the Project area is within or adjacent this Critical Habitat unit, or any other sensitive habitats. Therefore, the Project will not result in any loss or adverse modification of USFWS designated Critical Habitat, or any other special status habitats.

## Aquatic Resources Delineation

The Project Area is within the Sespe, Santa Clara Hydrologic Sub-Area (HSA 4403.31), within the larger Santa Clara Watershed (HUC 18070102) (USGS 2024). The Santa Clara Watershed is bound to the north by the Cuyama and Middle Kern-Upper Tehachapi-Grapevine Watersheds; to the north and east by the Antelope-Fremont Valleys Watershed; to the south by Los Angeles and Calleguas Watersheds; and to the west by the Ventura River Watershed. The Santa Clara Watershed encompasses the Santa Clara (Heritage) Valley, as well as mountains to the north. The Santa Clara Watershed is approximately 1,040,640 acres in area. Santa Clara River and its three primary tributaries, Piru Creek, Castaic Creek, and Sespe Creek, are the major hydrogeomorphic features within the Santa Clara River Watershed (Santa Clara River Conservancy 2024).

***Waters of the U.S.***

The USACE has authority to permit the discharge of dredged or fill material in WOTUS under Section 404 of the CWA. WOTUS are defined as:

33CFR § 328.3 Definitions For the purpose of this regulation these terms are defined as follows:

(a) (1) Waters which are: (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (ii) The territorial seas; or (iii) Interstate waters.

(b) (2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(c) 3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section: that are relatively permanent, standing or continuously flowing bodies of water.

(d) (4) Wetlands adjacent to the following waters: (i) Waters identified in paragraph (a)(1) of this section; or (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or, (a)(3) of this section and with a continuous surface connection to those waters;

(e) (5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section: 33 CFR 328.3 (up to date as of 8/14/2023) Definitions that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

Sespe Creek is considered and (a) 3 tributary to Waters of the US. Therefore it is subject to Section 404 of the Clean Water Act. However there are no areas that would be considered (a) 4 Wetlands. There is an approximately 70-foot-long roadside swale and culvert near the northwest corner of the Project area, between the east side of Whitewood Road and the Project area. However, this roadside swale and associated culvert are part of the City's storm drain system and would not be considered a WOTUS. This storm drain feature is not a TNW or a RPW tributary and does not have a significant nexus with a TNW. Additionally, it is not a wetland, as it does not support any hydrophitic vegetation.

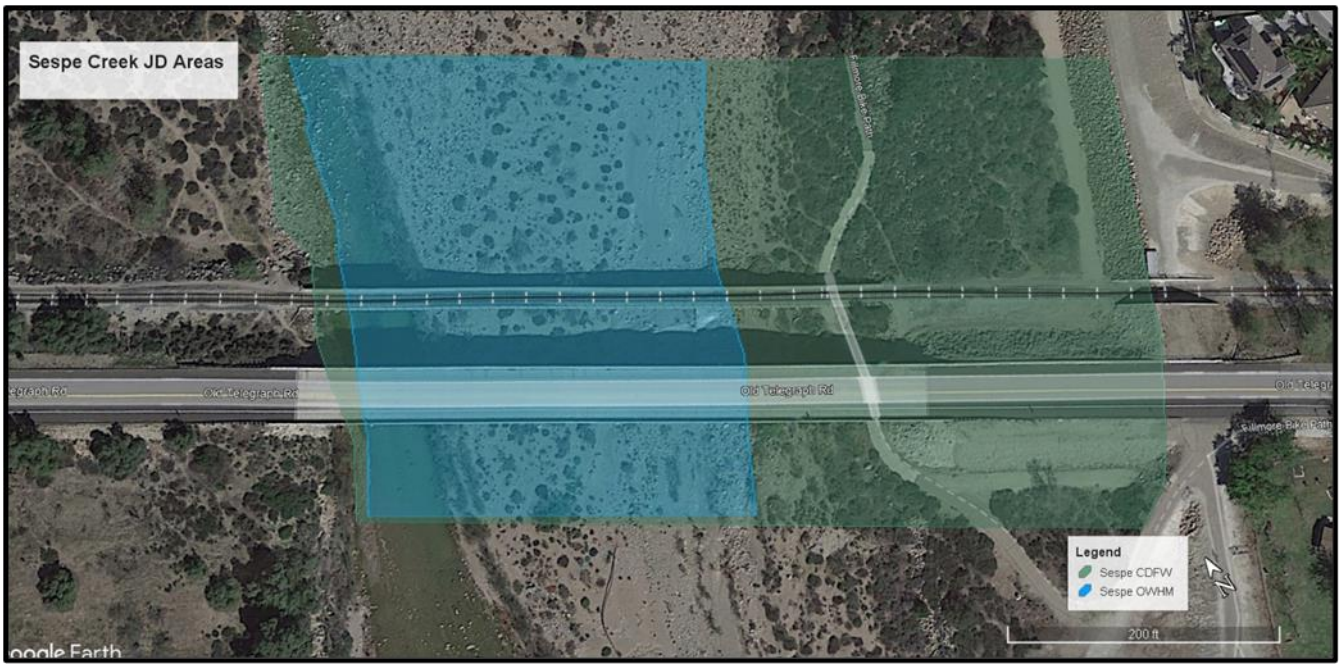
> *Findings*: Sespe Creek is considered and (a) 3 tributary to Waters of the US. Therefore, it is subject to Section 404 of the Clean Water Act. However, there are no areas that would be considered (a) 4 Wetlands.

***Waters of the State.***

Under Sections 1600 through 1607 of the California FGC, the CDFW has jurisdiction over lakes, rivers, streams, or other aquatic resources, stream-dependent wildlife resources, and riparian habitats. This jurisdiction can include, but is not limited to intermittent and ephemeral streams, rivers, creeks, dry washes, sloughs, USGS blue-line streams, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance

that support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994).

*Findings*: Sespe Creek is a “Waters of the US” and a “waters of the State” and is subject to regulation by the USACE under the Clean Water Act, the RWQCB under the the Clean Water act and Porter Cologne Water Quality Control Act, and the CDFW under Section 1600 of the California Fish and Game Code. Therefore, the Project will impact Waters of the US and Waters of the State. Regulatory Permitting will be required for impacts to these jurisdictional waters.




**VCTC USACE and CDFW Jurisdictional Limits**
VCTC Sespe Creek Bridge Repair Project
Arch Earth – Google Earth
**FIGURE 5**

# Conclusions and Recommendations

## Sensitive Biological Resources

A reconnaissance level BRA surveys of the Project Area was conducted by HDR in April and June of 2024 to identify potential habitat for special status wildlife within the Project Area. The only special status wildlife species, southwestern pond turtle, a federal Candidate Threatened species, has been detected on the south-western portion of the bridge. There is no suitable habitat for western yellow-billed cuckoo, southwestern willow flycatcher, unarmored threespine stickleback, California condor, foothill yellow legged frog, Santa Ana sucker, or least Bell's vireo within the Project Area. Although there is some marginally suitable habitat for south Steelhead, there have not been suitable conditions for the steelhead to migrate up from the Pacific Ocean to the potential spawning sites north of Filmore, California for many years.

The Project Area does not within USFWS designated Critical Habitat for any federally listed species, and the Project will not result in any loss or adverse modification of Designated Critical Habitat.

Southwestern Pond Turtle

Southwestern pond turtles and red-eared sliders have been observed within the bridge right-of-way approximately 300 feet south of the project area. Turtles have been observed in the flowing water as well as basking on driftwood and rock on the southern end of the damaged bridge within the bridge right of way.

- Measures should be implemented to exclude pond turtles from the work areas during bridge reconstruction activities.

Southern Steelhead Trout

Southern steelhead trout is federally listed as Endangered and a candidate, historically ran up Sespe Creek. There is currently a small run of southern steelhead trout that makes it to Sespe Creek during years of high stream flow. Migrating steelhead can generally navigate upstream against flows up to six feet per second and leap over four- to six-foot heights. Deep water (> half of the vertical jump) is necessary to gain the leaping momentum. Resting pools (>6") are necessary in long sections of high velocity flows. During low flows, boulder cascades, bedrock slides, and low-gradient riffles may become barriers to upstream fish movement. Steelhead may become stranded on their upstream migration if flows rapidly decline. (USDA 2003)

The Designated Critical Habitat (DCH) for the southern steelhead was designation in September 2005. The project area is not within DCH, however steelhead runs have historically occurred in

Sespe Creek. Currently, Sespe Creek has many areas where steelhead are blocked from returning to reproduce.

Only during rare events, where runoff within a watershed is sufficient to breach the sand bars that develop at the mouths of the creeks or rivers where they enter the Pacific Ocean, may runs occur. Only episodic periods of sufficient surface stream flow have been observed within the project area. Further, the proposed project will restrict work periods within the channel to April through October. Therefore, any potential to affect the steelhead run will be avoided.

The following avoidance measures are recommended during construction:

- Divert the flows away from the construction into a continuous diversion channel that maintains the connection between upstream and downstream flows. When work ceases in the channel, the bottom contour will be reestablished to pre-project condition.

Burrowing Owl

A BUOW habitat suitability assessment was conducted April of 2023 that included 100 percent visual coverage of any potentially suitable BUOW habitat within and adjacent the Project area. The result of the survey was that no evidence of BUOW was found in the survey area and most of the Project area is not suitable to support this species. No BUOW individuals or sign including castings, feathers or whitewash were observed and BUOW are considered absent from the Project Area at the time of survey. Although the Project is not likely to adversely affect this species, there is still a low potential for the Project area to become occupied by BUOW between the time the survey was conducted and the commencement of Project-related site disturbance. Therefore, the following precautionary avoidance measures are recommended to ensure the Project does not result in any impacts to BUOW:

- Pre-construction surveys for BUOW should be conducted no more than 3 days prior to commencement of Project-related ground disturbance to verify that BUOW remain absent from the Project Area.

Nesting Birds

The habitat within the Project Area is suitable to support nesting birds. Most native bird species are protected from unlawful take by the MBTA (Appendix D). In December 2017, the Department of the Interior (DOI) issued a memorandum concluding that the MBTA's prohibitions on take apply "[…] only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" (DOI 2017). Then in April 2018, the USFWS issued a guidance memorandum that further clarified that the take of migratory birds or their active nests (i.e., with eggs or young) that is incidental to, and not the purpose of, an otherwise lawful activity does not constitute a violation of the MBTA (USFWS 2018).

Additionally, the State of California provides additional protection for native bird species and their nests in the FGC (Appendix D). Bird nesting protections in the FGC include the following (Sections 3503, 3503.5, 3511, 3513 and 3800):

- Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.

- Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys, and falcons, among others), and Strigiformes (owls).

- Section 3511 prohibits the take or possession of Fully Protected birds.

- Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that Project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

- Section 3800 prohibits the take of any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird).

 We recommend conducting work outside of the nesting season, which is generally February 1st through August 31st. However, if all work cannot be conducted outside of nesting season, the following is recommended:

 To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist should conduct pre-construction nesting bird surveys prior to Project-related disturbance to suitable nesting areas to identify any active nests. If no active nests are found, no further action would be required. If an active nest is found, the biologist should set appropriate no-work buffers around the nest which would be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nest(s) and buffer zones should be field checked weekly by a qualified biological monitor. The approved no-work buffer zone should be clearly marked in the field, within which no disturbance activity should commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

## Aquatic Resources

In addition to the BRA and focused botanical field survey, HDR also assessed the Project Area for the presence of any state and/or federal jurisdictional waters. The result of the jurisdictional waters assessment is that there are no wetland or non-wetland WOTUS or waters of the State potentially subject to regulation by the USACE under Section 404 of the CWA, the RWQCB under Section 401 of the CWA and/or Porter Cologne Water Quality Control Act, or the CDFW under Section 1602 of the California FGC, respectively. However, the proposed Project would

likely result in temporary impacts to jurisdictional waters (Sespe Creek) consisting of temporary excavation and/or staging to rebuild the Santa Paula Branch Line Rail Bridge over Sespe Creek Overflow. Any proposed permanent or temporary impacts to this feature would require a Streambed Alteration Agreement from the CDFW, as well as CWA Sections 401/404 permits from the RWQCB and USACE, respectively.

USACE 404 Permit

The two most common types of permits issued by USACE under Section 404 of the CWA to authorize the discharge of dredged or fill material into WoUS are: a nation-wide permit (NWP) or an individual permit (IP). NWPs are general permits for specific categories of activities that result in minimal impacts to aquatic resources. The discharge must not cause the permanent loss of greater than ½ acre to WoUS, including the loss of no more than 300 linear feet of streambed. Projects that would exceed these limits would likely require an IP.

The temporary construction impacts associated with the accumulated silt removal and replacement of the damaged raw water collector would likely be covered under a Nationwide Permit No. 3 (NWP 3) involving Repair projects. Additionally, VCTC will be requesting a NWP 45 to repair the uplands to the pre-storm even OHWM.

A Pre-construction Notification (PCN) is required pursuant to General Condition 32 and Regional Condition 2 for specific regulated activities in the following location: The Santa Clara River watershed in Los Angeles and Ventura counties, including but not limited to Aliso Canyon, Agua Dulce Canyon, Sand Canyon, Bouquet Canyon, Mint Canyon, South Fork of the Santa Clara River, San Francisquito Canyon, Castaic Creek, Piru Creek, Sespe Creek and the main-stem of the Santa Clara River. The Los Angeles District shall be notified in accordance with General Condition 32.

Regional Water Quality Control Board 401 Certification

The Project Area is within the jurisdiction of the Los Angeles RWQCB (Regional Board 4). Under Section 401 of the CWA, the RWQCB must certify that the discharge of dredged or fill material into WoUS does not violate state water quality standards. The RWQCB also regulates impacts to waters of the State of California under the Porter Cologne Water Quality Control Act through issuance of a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending upon the level of impact and the waterway. In addition to the formal application materials and fee (based on area of impact), a copy of the appropriate California Environmental Quality Act (CEQA) documentation must be included with the application.

CDFW Section Lake or Streambed Alteration Agreement

A CDFW Lake or Streambed Alteration (LSA) Agreement is required for all activities that alter streams and lakes and their associated riparian habitat. In addition to the formal application

materials and fee (based on cost of the Project), a copy of the appropriate CEQA documentation must be included with the application. The Project will impact CDFW jurisdictional streambed

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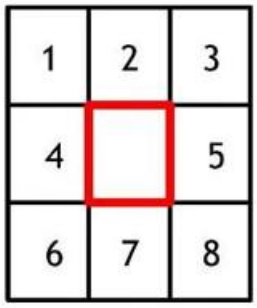
***CNDDB Species and Habitats Documented Within the Fillmore and Moorpark USGS 7.5-Minute Quadrangles***

# *Appendix A – CNDDB and IPaC Data*


QUADRANGLE LOCATION




1 Topatopa Mountains
2 Devils Heart Peak
3 Cobblestone Mountain
4 Santa Paula Peak
5 Piru
6 Santa Paula
7 Moorpark
8 Simi Valley West

ADJOINING QUADRANGLES

## Special Status Species Occurrence Potential Analysis

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Actinemys pallida | southwestern pond turtle | Proposed Threatened/ None | G2G3,SNR | Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |
| Anniella stebbinsi | Southern California legless lizard | None/ None | G3,S3 | Variety of habitats; generally in moist, loose soil of Broadleaved upland forest \| Chaparral \| Coastal dunes \| Coastal scrub | The Project Site is predominantly unvegetated. No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Antrozous pallidus | pallid bat | None/ None | G4,S3 | Pallid bats are typically found in arid or semi-arid habitats. The pallid bats typically roost in cracks and crevices, which may include tile roofs, exfoliating bark of trees, or rocky outcrops. | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability occurrence is low. |
| Arizona elegans occidentalis | California glossy snake | None/ None | G5T2,S2 | Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils. | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |
| Athene cunicularia | burrowing owl | None/ None | G4,S2 | Coastal prairie \| Coastal scrub \| Great Basin grassland \| Great Basin scrub \| Mojavean desert scrub \| Sonoran desert scrub \| Valley & foothill grassland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Bombus Crotchii | Crotch's Bumble Bee | | | Crotch's bumblebee inhabits grassland and scrub areas, requiring a hotter and drier environment than other bumblebee species, and can only tolerate a very narrow range of climatic conditions. Crotch's bumblebee nests underground, often in abandoned rodent dens. It is a nonmigratory species of bumblebee. Most observations of this species occur in southern California in coastal areas. The overwintering habitat of this bumblebee is not known, but it is believed that they have similar behaviors to other bumblebees in this respect, overwintering under leaf litter or soft soil. | The site is predominantly unvegetated and subject to flooding and scour. There are no food plants in the channel. Therefore the probability of this species occurring is very low. |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Bombus pensylvanicus | American bumble bee | None/ None | G3G4,S2 | Coastal prairie \| Great Basin grassland \| Valley & foothill grassland | The Project Site is predominantly unvegetated. No host species or otherwise suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |
| California Walnut Woodland | California Walnut Woodland | None/ None | G2,S2.1 | Cismontane woodland | No California Walnut were identified in the project area. Therefore the probability of occurrence is zero |
| Calochortus fimbriatus | late-flowered mariposa-lily | None/ None | G3,S3,1B.3 | This species occurs in chaparral of the native to the coastal mountain ranges of southern Monterey, San Luis Obispo, Santa Barbara and northern Ventura counties. | This lily blooms from late June to mid August. No suitable habitat for this species occurs within the Project Area. Additionally, no calochortus were observed during the site review. The probability of occurrence is zero |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Catostomus santaanae | Santa Ana sucker | Threatened/ None | G1,S1 | Aquatic \| South coast foothills colder flowing waters | No suitable habitat for this species occurs within the project area. The species is not known in this reach of Sespe Creek. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is low. |
| Coccyzus americanus occidentalis | western yellow-billed cuckoo | Threatened/ Endangered | G5T2T3,S1 | Riparian forest | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |
| Delphinium umbraculorum | umbrella larkspur | None/ None | G3,S3,1B.3 | Chaparral \| Cismontane woodland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Diadophis punctatus modestus | San Bernardino ringneck snake | None/ None | G5T2T3,S2? | Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams. | Marginal habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence low. |
| Elanus leucurus | white-tailed kite | None/ None | G5,S3S4 | Cismontane woodland \| Marsh & swamp \| Riparian woodland \| Valley & foothill grassland \| Wetland | No nesting opportunities occur on in the project area, however, the area could be utilized for foraging. Probability of occurrence is moderate. |
| Empidonax traillii extimus | southwestern willow flycatcher | Endangered/ Endangered | G5T2,S3 | Riparian woodland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |
| | | | | | |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Gasterosteus aculeatus williamsoni | unarmored threespine stickleback | Endangered/ Endangered | G5T1,S1 | This species I extremely limited in the upper Santa Clara River. They require clear, flowing, well-oxygenated water with associated pools and eddies of quiet water and areas of dense vegetation or debris to provide adequate cover and food supply. | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero. |
| Gila orcuttii | arroyo chub | None/ None | G2,S2 | Aquatic \| South coast flowing waters typically deeper than 40 cm withing Malibu Creek, Santa Clara, San Luis Rey, and Santa Margarita River drainages, southern California | This species is not known to occur in Sespe Creek. Further, there is suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Gymnogyps californianus | California condor | Endangered/ Endangered | G1,S2 | Chaparral \| Valley & foothill grassland | There is no Condor habitat within the project area. Although, the area is in proximity to the Condor Reserve, they are large carrion foragers, and the likelihood of suitable food sources within the project area is very low. |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Lasiurus cinereus | hoary bat | None/ None | G3G4,S4 | Broadleaved upland forest \| Cismontane woodland \| Lower montane coniferous forest \| North coast coniferous forest | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Lepechinia rossii | Ross' pitcher sage | None/ None | G1,S1,1B.2 | Chaparral | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Lupinus paynei | Payne's bush lupine | None/ None | G1Q,S1,1B.1 | Coastal scrub \| Riparian scrub \| Valley & foothill grassland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Monardella sinuata ssp. gerryi | Gerry's curly-leaved monardella | None/ None | G3T1,S1,1B.1 | Coastal scrub | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Neotoma lepida intermedia | San Diego desert woodrat | None/ None | G5T3T4,S3S4 | Coastal scrub | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Oncorhynchus mykiss irideus pop. 10 | steelhead - southern California DPS | Endangered/ Candidate Endangered | G5T1Q,S1 | Aquatic \| South coast flowing waters | Although once considered suitable for steelhead run, Sespe Creek is no longer considered suitable to support the Steelhead. The probability of occurrence is low |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Phrynosoma blainvillii | coast horned lizard | None/ None | G4,S4 | Chaparral \| Cismontane woodland \| Coastal bluff scrub \| Coastal scrub \| Desert wash \| Pinon & juniper woodlands \| Riparian scrub \| Riparian woodland \| Valley & foothill grassland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Polioptila californica californica | coastal California gnatcatcher | Threatened/ None | G4G5T3Q,S2 | Coastal bluff scrub \| Coastal scrub | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Pseudognaphalium leucocephalum | white rabbit-tobacco | None/ None | G4,S2,2B.2 | Chaparral \| Cismontane woodland \| Coastal scrub \| Riparian woodland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Rana boylii pop. 6 | foothill yellow-legged frog - south coast DPS | Endangered/ Endangered | G3T1,S1 | Aquatic \| Riparian forest \| Riparian scrub \| Riparian woodland \| South coast flowing waters | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Riparia riparia | bank swallow | None/ Threatened | G5,S3 | Riparian scrub \| Riparian woodland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Southern Coast Live Oak Riparian Forest | Southern Coast Live Oak Riparian Forest | None/ None | G4,S4 | Riparian forest | No Riparian Habitat is present within the Project Area |
| Southern Cottonwood Willow Riparian Forest | Southern Cottonwood Willow Riparian Forest | None/ None | G3,S3.2 | Riparian forest | No Riparian Habitat is present within the Project Area |
| Southern Mixed Riparian Forest | Southern Mixed Riparian Forest | None/ None | G2,S2.1 | Riparian forest | No Riparian Habitat is present within the Project Area |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Southern Riparian Scrub | Southern Riparian Scrub | None/ None | G3,S3.2 | Riparian scrub | No Riparian Habitat is present within the Project Area |
| Southern Sycamore Alder Riparian Woodland | Southern Sycamore Alder Riparian Woodland | None/ None | G4,S4 | Riparian woodland | No Riparian Habitat is present within the Project Area |
| Southern Willow Scrub | Southern Willow Scrub | None/ None | G3,S2.1 | Riparian scrub | No Riparian Habitat is present within the Project Area |
| Spea hammondii | western spadefoot | None/ None | G2G3,S3S4 | Cismontane woodland \| Coastal scrub \| Valley & foothill grassland \| Vernal pool \| Wetland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |
| Symphyotrichum greatae | Greata's aster | None/ None | G2,S2,1B.3 | Broadleaved upland forest \| Chaparral \| Cismontane woodland \| Lower montane coniferous forest \| Riparian woodland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Taxidea taxus | American badger | None/ None | G5,S3 | American badgers prefer grasslands and open areas with grasslands, which can include parklands, farms, and treeless areas with friable soil and a supply of rodent prey. They may also be found in forest glades and meadows, marshes, brushy areas, hot deserts, and mountain meadows. They are sometimes found at elevations up to 12,000 feet (3,700 m) but are usually found in the Sonoran and Transition life zones (which are at elevations lower and warmer than those characterized by coniferous forests). | Marginal Habitat occurs adjacent to the project Area. The probability of occurrence is low. |
| Thamnophis hammondii | two-striped gartersnake | None/ None | G4,S3S4 | Marsh & swamp \| Riparian scrub \| Riparian woodland \| Wetland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |

| Scientific Name | Common Name | Listing Status Federal/ State | Other Status | Habitat | Occurrence Potential |
|---|---|---|---|---|---|
| Vireo bellii pusillus | least Bell's vireo | Endangered/ Endangered | G5T2,S3 | Riparian forest \| Riparian scrub \| Riparian woodland | No suitable habitat for this species occurs within the project area. The Project area is an active flood plain that has been completely washed out during the 2022-2023 storm season. The probability of occurrence is zero |

## Coding and Terms

**E = Endangered** **T = Threatened** **C = Candidate** **FP = Fully Protected** **SSC = Species of Special Concern** **R = Rare**

**State Species of Special Concern:** An administrative designation given to vertebrate species that appear to be vulnerable to extinction because of declining populations, limited acreages, and/or continuing threats. Raptor and owls are protected under section 3502.5 of the California Fish and Game code: "It is unlawful to take, possess or destroy any birds in the orders Falconiformes or Strigiformes or to take, possess or destroy the nest or eggs of any such bird."

**State Fully Protected:** The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, mammals, amphibians and reptiles. Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

## Coding and Terms

**Global Rankings (Species or Natural Community Level):**
G1 = Critically Imperiled – At very high risk of extinction due to extreme rarity (often 5 or fewer populations), very steep declines, or other factors.
G2 = Imperiled – At high risk of extinction due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors.
G3 = Vulnerable – At moderate risk of extinction due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors.
G4 = Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
G5 = Secure – Common; widespread and abundant.

**Subspecies Level:** Taxa which are subspecies or varieties receive a taxon rank (T-rank**)** attached to their G-rank. Where the G-rank reflects the condition of the entire species, the T-rank reflects the global situation of just the subspecies. For example: the Point Reyes mountain beaver, *Aplodontia rufa* ssp. *phaea* is ranked G5T2. The G-rank refers to the whole species range i.e., *Aplodontia rufa.* The T-rank refers only to the global condition of ssp. *phaea*.

**State Ranking:**
S1 = Critically Imperiled – Critically imperiled in the State because of extreme rarity (often 5 or fewer populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the State.
S2 = Imperiled – Imperiled in the State because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the State.
S3 = Vulnerable – Vulnerable in the State due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation from the State.
S4 = Apparently Secure – Uncommon but not rare in the State; some cause for long-term concern due to declines or other factors.
S5 = Secure – Common, widespread, and abundant in the State.

**California Rare Plant Rankings (CNPS List):**
1A = Plants presumed extirpated in California and either rare or extinct elsewhere.
1B = Plants rare, threatened, or endangered in California and elsewhere.
2A = Plants presumed extirpated in California, but common elsewhere.
2B = Plants rare, threatened, or endangered in California, but more common elsewhere.
3 = Plants about which more information is needed; a review list.
4 = Plants of limited distribution; a watch list.

**Threat Ranks:**
.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
.3 = Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

# *Appendix B - Site Photos*

| | |
|---|---|
|  | Photo 1. View from damaged abutment looking east |
|  | Photo 2. View of 2024 storm damage. Looking East |

| | |
|---|---|
|  | Photo 3. Typical channel view. |
|   | Photo 4. South abutment looking east |

| | |
|---|---|
|  | Photo 5. View of debris on undamaged section of the bridge. Looking West |
|  | Photo 6. View of damaged bridge looking northerly. |

# *Appendix C - Plant List*

## List of Plant Species Observed within the Project Area

| Scientific Name | Common Name | Life Form |
|---|---|---|
| **Adoxaceae** | **Moschatel Family** | |
| *Sambucus nigra* | black elderberry | shrub |
| | | |
| **Apiaceae** | **Parsley Family** | |
| *Apiastrum angustifolium* | wild celery | annual herb |
| | | |
| **Asteraceae** | **Aster Family** | |
| *Artemisia californica* | California sagebrush | shrub |
| *Encelia californica* | bush sunflower | shrub |
| *Eriophyllum multicaule* | branched woolly sunflower | annual herb |
| *Oncosiphon piluliferum** | stinknet* | annual herb |
| | | |
| **Brassicaceae** | **Mustard Family** | |
| *Hirschfeldia incana* ** | short podded mustard ** | perennial herb |
| | | |
| **Boraginaceae** | **Borage family** | |
| *Amsinckia intermedia* | common fiddleneck | annual herb |
| *Cryptantha* spp. | cryptantha | annual herb |
| *Phacelia cicutaria* | caterpillar phacelia | annual herb |
| *Phacelia minor* | California bluebell | annual herb |
| | | |
| **Fabaceae** | **Pea Family** | |
| *Acmispon glaber* | deerweed | perennial herb |
| *Lupinus bicolor* | lupine | annual or perennial herb |
| | | |
| **Geraniaceae** | **Walnut Family** | |
| *Erodium cicutarium*** | redstem fillaree** | annual herb |
| | | |
| **Lamiaceae** | **Mint family** | |
| *Salvia columbariae* | chia sage | annual herb |
| *Salvia mellifera* | black sage | shrub |
| | | |
| **Onagraceae** | **Evening Primrose Family** | |
| *Camissoniopsis bistorta* | California sun cup | annual herb |
| | | |
| **Papaveraceae** | **Poppy Family** | |
| *Eschscholzia californica* | California poppy | annual or perennial herb |

| Scientific Name | Common Name | Life Form |
|---|---|---|
| | | |
| | | |
| **Poaceae** | **Grass Family** | |
| *Bromus* spp.** | brome grasses** | annual grasses |
| | | |
| **Polemoniaceae** | **Phlox Family** | |
| *Linanthus dianthiflorus* | fringed linanthus | annual herb |
| | | |
| | | |
| | | |

*non-native
**invasive species

# *Appendix D - Regulatory Framework*

## Federal Regulations

### *Clean Water Act*

The purpose of the Clean Water Act (CWA) of 1977 is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" (WOTUS) without a permit from the United States Army Corps of Engineers (USACE). The definition of waters of the United States includes rivers, streams, estuaries, territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; in California this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

### *Rivers and Harbors Act - Section 10)*

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable waters of the U.S.

### *Federal Endangered Species Act (ESA)*

The federal Endangered Species Act (ESA) of 1973 protects plants and wildlife that are listed by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) as endangered or threatened. Section 9 of the ESA (USA) prohibits the taking of endangered wildlife, where taking is defined as any effort to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 United States Code [USC] 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect an endangered species (including plants) or its Critical Habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity, provided the action will not jeopardize the continued existence of the species. The ESA specifies that the USFWS designate habitat for a species at the time of its listing in which are found the physical or biological features "essential to the conservation of the species," or which may require "special Management consideration or protection..." (16 USC § 1533[a][3].2; 16 USC § 1532[a]). This designated Critical Habitat is then afforded the same protection under the ESA as individuals of the species itself, requiring issuance of an Incidental Take Permit prior to any activity that results in "the destruction or adverse modification of habitat determined to be critical" (16 USC § 1536[a][2]).

### *Interagency Consultation and Biological Assessments*

Section 7 of ESA provides a means for authorizing the "take" of threatened or endangered species by federal agencies, and applies to actions that are conducted, permitted, or funded by a federal agency. The statute requires federal agencies to consult with the USFWS or National Marine Fisheries Service (NMFS), as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of Critical Habitat for these species. If a Proposed Project "may affect" a listed species or destroy or modify Critical Habitat, the lead agency is required to prepare a biological assessment evaluating the nature and severity of the potential effect.

### *Habitat Conservation Plans*

Section 10 of the federal ESA requires the acquisition of an Incidental Take Permit (ITP) from the USFWS by non-federal landowners for activities that might incidentally harm (or "take") endangered or threatened wildlife on their land. To obtain a permit, an applicant must develop a Habitat Conservation Plan that is designed to offset any harmful impacts the proposed activity might have on the species.

### *Fish and Wildlife Coordination Act*

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661 to 667e et seq.) applies to any federal Project where any body of water is impounded, diverted, deepened, or otherwise modified. Project proponents are required to consult with the USFWS and the appropriate state wildlife agency.

### *Bald and Golden Eagle Protection Act*

The Bald and Golden Eagle Protection Act (The Eagle Act) (1940), amended in 1962, was originally implemented for the protection of bald eagles (*Haliaeetus leucocephalus*). In 1962, Congress amended the Eagle Act to cover golden eagles (*Aquila chrysaetos*), a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. This act makes it illegal to import, export, take (molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof. The golden eagle, however, is accorded somewhat lighter protection under the Eagle Act than that of the bald eagle.

### *Magnuson-Stevens Fishery Conservation and Management Act*

The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. Section 1801 et seq.) requires all federal agencies to consult with the NMFS on all actions or proposed actions (permitted, funded, or undertaken by the agency) that may adversely affect fish habitats. It also requires cooperation among NMFS, the councils, fishing participants, and federal and state agencies to protect, conserve, and enhance essential fish habitat, which is defined as those waters and substrates needed by fish for spawning, breeding, feeding, and growth to maturity.

### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MBTA) of 1918 implements international treaties between the United States and other nations created to protect migratory birds, any of their parts, eggs, and nests from activities, such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (CFGC).

### *Executive Orders (EO)*

*Invasive Species – EO 13112 (1999)*: Issued on February 3, 1999, promotes the prevention and introduction of invasive species and provides for their control and minimizes the economic, ecological, and human health impacts that invasive species cause through the creation of the Invasive Species Council and Invasive Species Management Plan.

*Migratory Bird – EO 13186 (2001)*: Issued on January 10, 2001, promotes the conservation of migratory birds and their habitats and directs federal agencies to implement the Migratory Bird Treaty Act. Protection and Enhancement of Environmental Quality – EO 11514 (1970a), issued on March 5, 1970, supports the purpose and policies of the National Environmental Policy Act (NEPA) and directs federal agencies to take measures to meet national environmental goals.

*Protection of Wetlands—Executive Order 11990 (1977)*

Issued on May 24, 1977, helps avoid the long-term and short-term adverse impacts associated with destroying or modifying wetlands and avoiding direct or indirect support of new construction in wetlands when there is a practicable alternative.

***Migratory Bird Treaty Reform Act*** T

The Migratory Bird Treaty Reform Act (Division E, Title I, Section 143 of the Consolidated Appropriations Act, 2005, PL 108–447) amends the Migratory Bird Treaty Act (16 U.S.C. Sections 703 to 712) such that nonnative birds or birds that have been introduced by humans to the United States or its territories are excluded from protection under the Act. It defines a native migratory bird as a species present in the United States and its territories as a result of natural biological or ecological processes. This list excluded two additional species commonly observed in the United States, the rock pigeon (*Columba livia*) and domestic goose (*Anser domesticus*).

***Birds of Conservation Concern***

Birds of Conservation Concern (BCC) is a USFWS list of bird species identified to have the highest conservation priority, and with the potential for becoming candidates for listing as federally threatened or endangered. The chief legal authority for BCC is the Fish and Wildlife Conservation Act of 1980 (FWCA). Other authorities include the FESA, the Fish and Wildlife Act of 1956, and the Department of the Interior U.S Code (16 U.S.C. § 701). The 1988 amendment to the FWCA (Public Law 100-653, Title VIII) requires the Secretary of the Interior, through the USFWS, to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973" (USFWS, 2008a).

***Coastal Zone Management Act***

The Coastal Zone Management Act was enacted 1972 to establish a national policy to: "…preserve, protect, develop, and where possible, to restore or enhance, the resources of the Nation's coastal zone…." The CZMA allows the States, with approval from the Office of Ocean and Coastal Resource Management (OCRM), under the National Oceanic and Atmospheric Administration (NOAA), to define their own coastal zones by developing and implementing Coastal Zone Management Programs (CMPs). References (a) and (b) also require that Federal agencies ensure that Federal actions that have reasonably foreseeable effects on any land or water use or natural resource of the coastal zone, regardless of location, be consistent to the maximum extent practicable with the enforceable policies of a coastal State's federally approved CMP.

## State Regulations

***California Fish and Game Code Sections 1600 through 1606 of the CFGC***

This section requires that a Streambed Alteration Application be submitted to the CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the Department and the applicant is the Streambed Alteration Agreement. Often, Projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In

these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

***California Endangered Species Act***

The California Endangered Species Act (CESA) (Sections 2050 to 2085) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats by protecting “all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation.” Animal species are listed by the CDFW as threatened or endangered, and plants are listed as rare, threatened, or endangered. However, only those plant species listed as threatened or endangered receive protection under the California ESA.

CESA mandates that state agencies do not approve a Project that would jeopardize the continued existence of these species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. There are no state agency consultation procedures under the California ESA. For Projects that would affect a species that is federally and state listed, compliance with ESA satisfies the California ESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the California ESA under Section 2080.1. For Projects that would result in take of a species that is state listed only, the Project sponsor must apply for a take permit, in accordance with Section 2081(b).

***Fully Protected Species***

Four sections of the California Fish and Game Code (CFGC) list 37 fully protected species (CFGC Sections 3511, 4700, 5050, and 5515). These sections prohibit take or possession "at any time" of the species listed, with few exceptions, and state that "no provision of this code or any other law will be construed to authorize the issuance of permits or licenses to ‘take’ the species,” and that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession.

***Bird Nesting Protections***

Bird nesting protections (Sections 3503, 3503.5, 3511, 3513 and 3800) in the CFGC include the following:

- Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.
- Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys, and falcons, among others), and Strigiformes (owls).

- Section 3511 prohibits the take or possession of Fully protected birds.
- Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that Project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

Section 3800 prohibits the take of any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird).

***Native Plant Protection Act***

The Native Plant Protect Act (NPPA) (1977) (CFGC Sections 1900-1913) was created with the intent to "preserve, protect, and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as endangered or rare and to protect endangered and rare plants from take. CESA (CFGC 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code.

***Natural Communities Conservation Planning Act***

This act was enacted to encourage broad-based planning to provide for effective protection and conservation of the state's wildlife resources while continuing to allow appropriate development and growth (CFGC Sections 2800 to 2835). Natural Community Conservation Plans (NCCP) may be implemented, which identify measures necessary to conserve and manage natural biological diversity within the planning area, while allowing compatible and appropriate economic development, growth, and other human uses.

***Senate Concurrent Resolution No. 17 – Oak Woodlands***

State Senate Concurrent Resolution No. 17 is legislation that requests state agencies having land use planning duties and responsibilities to assess and determine the effects of their decisions or actions within any oak woodlands containing Blue, Engleman, Valley, or Coast Live Oak. The measure requests those state agencies to preserve and protect native oak woodlands to the maximum extent feasible or provide replacement plantings where designated oak species are removed from oak woodlands. The mitigation measures, as described above, will ensure that impacts to oak woodlands are less than significant.

***California Environmental Quality Act Significance Criteria***

Section 15064.7 of the California Environmental Quality Act (CEQA) Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the Initial Study checklist contained in Appendix G

of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if a project would result in any of the following:

· 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 (CDFW) or USFWS;

· Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS;

· Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means;

· 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;

· Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

· Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional or state HCP.

An evaluation of whether or not an impact on biological resources would be significant must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. This is necessary because although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

SPBL-2025-01

SESPE CREEK OVERFLOW
RAILROAD BRIDGE REPAIR

**EXHIBIT E**
CULTURAL RESOURCES MEMORANDUM

Jacobs

Memorandum

| | |
|---|---|
| **Subject** | Preliminary Historical Evaluation of the Sespe Creek Overflow Bridge, Fillmore (vicinity), Ventura County, California |
| **Attention** | Lisa Patterson, Jacobs Engineering Group, Inc. |
| **From** | Patricia Ambacher, MA, Matthew Sterner, MA, RPA, Jacobs Engineering Group, Inc. |
| **Date** | August 2, 2023 |

# 1. Introduction

At the request of VCTC, Jacobs Engineering Group, Inc. (Jacobs) prepared this preliminary cultural resources evaluation of the Sespe Creek Overflow Bridge for environmental compliance under Section 106 of the National Historic Preservation Act (Section 106). The project site surrounds the Sespe Creek bridge, a railroad bridge that crosses the Sespe Creek in the vicinity of Fillmore, Ventura County, California.

## 1.1 Project Location and Description

The Project is located where the rail line crosses Sespe Creek at approximately Mile Post 423.44, immediately east of Old Telegraph Road. The legal description of the Project location falls in Section 25, Township 4 North, Range 20 West (Figures 1 and 2).

The proposed project requires the bridge to be repaired after approximately 90-feet was washed away during winter storms in January 2023. Several piers were destroyed, leaving unsupported track spanning the northern portion of the Sespe Creek channel (Figure 3). Repairs will likely be undertaken from a combination of track and channel construction efforts.

# 2. Regulatory Context

The proposed project needs a U.S. Army Corps of Engineers Section 404 permit, which requires the project to comply with Section 106.

## 2.1 Section 106 of the National Historic Preservation Act

The project is subject to the requirements of Section 106, as amended and its implementing regulations (Title 36 Code of Federal regulations [CFR], Part 800 [36 CFR 800] (Section 106). Section 106 calls for considerable consultation with the State Historic Preservation Officer (SHPO), Native American tribes, and interested members of the public throughout the process. The four key steps of the Section 106 process are as follows:

1. Initiate Section 106 (36 CFR 800.3).
2. Identify historic properties, resources eligible for inclusion in the National Register of Historic Places (NRHP) (36 CFR 800.4).
3. Assess the effects of the undertaking to historic properties in the APE (36 CFR 800.5).
4. Resolve adverse effects (36 CFR Part 800.6).

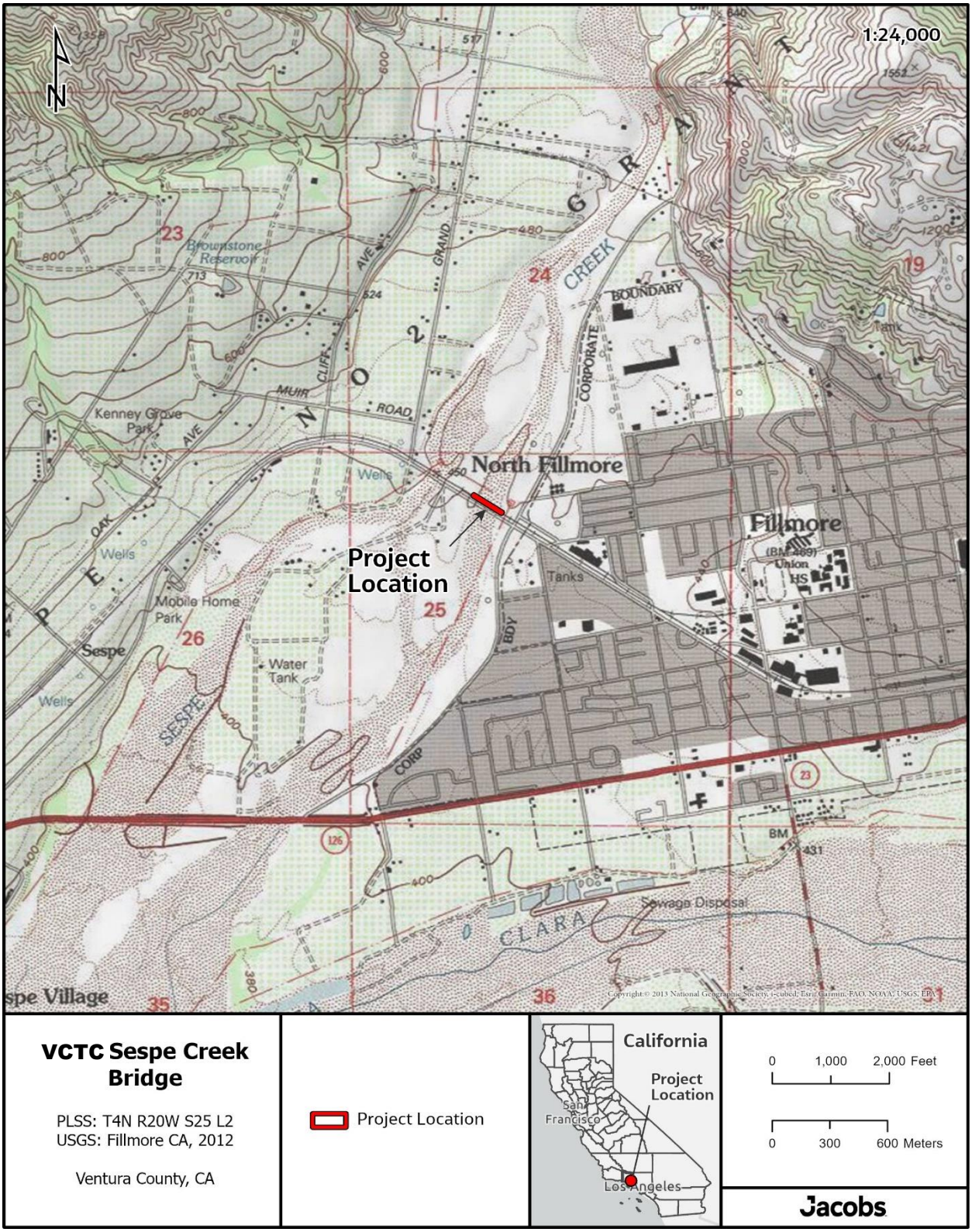



**Figure 1. VCTC Sespe Bridge Location.**


**Figure 2. Aerial View of VCTC Sespe Creek Bridge.**


**Figure 3. Photographs of VCTC Sespe Creek Bridge, January 2023.**

### 2.1.1 National Register of Historic Places

The NRHP is the nation's official list of buildings, structures, objects, sites, and districts in the U.S. that are significant in American history, architecture, engineering, archaeology, and culture. A property must be at least 50 years old to be evaluated for eligibility, or it must possess exceptional significance. The criteria used to evaluate historic properties for inclusion in the NRHP are summarized below:

A. Event – Properties associated with events that have made a significant contribution to the broad patterns of our history.

B. Person – Properties associated with the lives of persons significant in our past.

C. Architecture/Engineering – Properties that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

D. Archaeology – Properties that have yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one of these evaluation criteria a historic property must retain integrity in order to convey its significance. Integrity is measured by seven aspects:

- Location – The place where the historic property was constructed or where the historic event occurred.
- Design – The combination of elements that create the form, plan, space, structure, and style of the property.
- Setting – The physical environment of the historic property.
- Materials – The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form the historic property.
- Workmanship – The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- Feeling – The property's expression of the aesthetic or historic sense of a particular period of time.
- Association – The direct link between an important historic event or person and a historic property.

### 2.1.2 Effects Assessment

If historic properties are identified, it must be determined if they will be adversely affected by the undertaking. The federal agency shall assess adverse effects, if any, in accordance with the Criteria of Adverse Effect (36 CFR 800.5(a)1). Adverse effects on historic properties include, but are not limited to:

1. Physical destruction of or damage to all or part of the property.
2. Alteration of the property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent the SOI's Standards for the Treatment of historic Properties (36 CFR 68) and applicable guidelines.
3. Removal of the property from its historic location.

4. Changing the character of the property's use of physical features within the property's setting that contribute to its historic significance.
5. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.
6. Neglect of the property that causes its deterioration, except where such neglect and deterioration are recognized qualities of the property of religious or cultural significance to Native American tribe or Native Hawaiian organization.
7. Transfer, lease, or sale of the property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

Adverse effects on historic properties often are resolved through preparation of a memorandum of agreement or a programmatic agreement developed in consultation with the lead federal agency, SHPO, Native American tribes, and interested members of the public. The Advisory Council on Historic Preservation is also invited to participate.

## 3. Historic Context

To accurately assess the potential historical significance of the Sespe Creek Overflow Bridge, the following section provides an evaluative historic context covering the themes: Ventura County and Fillmore's development, railroad development, and railroad bridge construction and design.

### 3.1 Ventura County and Fillmore Development

Ventura County was established in 1873 and Ventura was the county seat (Hoover and Kyle 1990). At that time, the county's population was more than 3,000 and agriculture was the principal source of revenue. By the early 1900s, the oil industry joined agriculture as an economic driving industry for Ventura County (County of Ventura 2023). During World War II, the U.S. military took temporary control of Port Hueneme for the transportation of cargo to support the war effort. Like most of California, Ventura experienced a population boom after World War II and the county's boundaries expanded. By 2022, agriculture remains an important industry for Ventura County in addition to healthcare and the technology industries.

Fillmore was established by the Southern Pacific Railroad (SPRR) and was named for the company's general superintendent, Jerome Fillmore. The SPRR and the Sespe Land and Water Company promoted Fillmore's location and in 1888, a street map of the town was recorded with Ventura County. By 1900, Fillmore had a population of 150 (Fillmore Historical Museum 2023a). The train depot became the center of the Fillmore community bringing new settlers who began planting orchards and crops. Agriculture became a leading industry for the Fillmore (Fillmore Historical Museum 2023b).

### 3.2 Railroad Development

Railroads were developed in the U.S. during the early nineteenth century and the earliest U.S. railroads were constructed without strict government oversight, which resulted with the highest density of tracks appearing in the northeast (Library of Congress 2018). Over time, the need for increased railroad connectivity from the east to the west coast was required if increased trade, settlement, prosperity, and population growth were to occur in the new western frontier (American-Rails 2021).

The California Gold Rush attracted a mass of people westward subjecting them to arduous travel by ship or

wagon (Bennett 1915; History.com 2021). An interconnected railroad network throughout the country was necessary to revolutionize transportation and westward expansion (Bennett 1915). The completion of the transcontinental railroad became a reality when engineer Theodore Judah petitioned an agreement from investors Collis P. Huntington, Mark Hopkins, Charles Crocker, and Leland Stanford, known as the Big Four, to establish the Central Pacific Railroad (CPRR) in Sacramento (Galloway 1989). The passage of the Pacific Railroad Act of 1862 and the western and eastern routes secured, Judah could move his plans with CPRR forward. The Union Pacific Railroad (UPRR) was formed to build the middle route through the Rocky Mountains (Borneman 2010). The transcontinental railroad was completed in 1869 when the two railroads met at Promontory Point in Utah.

The period between the 1880s and 1920s is often referred to as the "Golden Age" of railroads, as the industry experienced an era of profitability and expansion. By 1916, there were more than 254,000 miles of track nationwide (American-Rails 2021). During the 1930s, also referred to as the "Silver Age," streamliner design attempted to breathe new life into the railroad. Designers used new technologies and methods to promote new engines, including diesel, as a last-ditch attempt to retain passenger traffic (Solomon 2008). The aerodynamic machines fell out of favor by the 1950s, as passengers opted for the personal automobile.

### 3.2.1 Southern Pacific Railroad

The Southern Pacific Railroad (SPRR) was started as a branch line from San Francisco to San Diego by the Big Four and was incorporated in 1865 (UPRR 2023). That same year, the SPRR took operational control of the CPRR (Yenne 1996:51). By 1877, these two railroads controlled more than 85 percent of all the railroads in California that totaled more than 2,300 miles of track (Daggett 1922:140). The CPRR eventually merged with the SPRR in 1959 and the SPRR merged with the Union Pacific Railroad (UPRR) in 1996 (UPRR 2023).

The SPRR's coastal route, the Coast Line, between Los Angeles and San Francisco began in 1887 (County of Ventura 2023). The preferred route was through the Santa Clara River Valley to Ventura with train stops situated approximately 10 miles apart. The railroad also wanted to be far enough from the Santa Clara River and its tributaries to prevent flooding (Fillmore Historical Museum 2023). Sugar beets, citrus fruits, and beans were popular railroad freight and the railroad connected to the wharf along the Santa Barbara Channel, which would become Port of Hueneme (Ventura County 2023).

An approximately 30-miles long segment of the former Southern Pacific branch extends from the eastern edge of the city of Ventura to the town of Piru to the east. It eventually became known as the Santa Paula Branch after mainline Coast Line traffic was rerouted following the opening of the Santa Susana Tunnel in 1904. The right-of-way originally extended farther into the Santa Clarita Valley to Saugus, where it connected with SP's line to the San Joaquin Valley via Tehachapi Pass (Lustig 2021a).

The VCTC bought the Santa Paul Branch Line railroad in 1995 (VCTC 2023). In 2021, VCTC entered into a 35-year Railroad Lease and Operations Agreement with Sierra Northern Railway (VCTC 2023).

## 4. Railroad Bridge Construction and Design

In 1840 and 1846, the emergence of the Howe Truss patents propelled railroad bridge design in a new direction. Other patents soon followed, such as that of father and son team Caleb and Thomas Pratt who

received a patent in 1844, and James Warren who patented a design in 1848 in England. All patents were variations on how the trusses transferred loads or weight. These new designs would favor cast and wrought iron members over timber, and Pratt and Warren truss designs, or a variation of them, became standard by the late nineteenth century (Solomon 2008).

The U.S. railroad and steel industries emerged during a crucial time in western expansion. Steel quickly became the favored material. The development of the steel industry produced new designs to support the demand for longer, taller, and stronger bridges. Companies started to mass-produce steel bridges using standardized plans and patented truss designs, which resulted in common steel truss bridge types throughout the country (Kramer 2004).

Bridges with movable spans were a practical solution to the problem of how to cross a waterway while maintaining access for ship traffic. As early as the mid-nineteenth century, movable span bridges were constructed using timber truss systems that rotated on a central pier. These early swing bridges were manually operated (Jensen, n.d.). The introduction of steel spans and electric motors allowed for the development of larger, more permanent swing span bridges. By 1870, the center pivot swing span became one of the more common types of movable span steel bridges constructed in the U. S. (Jensen, n.d.; Mead & Hunt 2009).

By the early- to mid-twentieth century, the dominance of the swing span design had diminished in favor of other movable bridge types, such as bascule and vertical lift designs (Parsons Brinkerhoff and Engineering and Industrial Heritage 2005). By the 1920s, new swing span bridges were “virtually obsolete” around the country, although “because of their basic economy of materials and simplified construction, the swing bridge was utilized during the Depression for large work-relief bridge projects” (Jensen, n.d.).

In 1950, the Portland Cement Association began load testing a prestressed concrete railway trestle slab in their laboratories in Illinois. Full scale load tests began in October 1953 by the Association of American Railroads on a 19-foot prestressed concrete trestle slab in Colorado. In 1954, the first prestressed concrete railroad bridge was in use in the U.S. Between 1954 and 1957, engineers designed and constructed longer spans using slabs and boxes to replace timber trestles. These early spans were 20 to 30 feet and were typically supported on prestressed concrete piles. Prestressed concrete box girder bridges became commonplace in railroad bridge design for the next 30 years (Goldberg 1983).

## 5. Eligibility Determination

### 5.1 Description

This description is based on photographs and bridge inspections reports from 2021 (Wilson & Company 2021).

The bridge is a concrete double box girder constructed in 1969 (Wilson & Company 2021). Its total length is 450 feet with a vertical clearance of 14 feet. Its 15 spans are 29 feet-10 inches each (VCTC 2023). It has a ballast bridge deck with timber ties and concrete abutments (Wilson & Company 2021). The bridge was partially washed away (see Figure 3) during heavy rain storms in the early part of January 2023 (*Ventura County Star* 2023). Three spans, approximately 90 feet, on the western end of the bridge were washed out.

### 5.2 Evaluation

The Sespe Creek Overflow Bridge does not meet the criteria for the NRHP because of a lack of significance and integrity. Under Criterion A, this bridge did not play a significant role in the railroad development or in the development of Fillmore or Ventura County. The bridge was constructed in 1969, which is well past the peak of the railroad's influence on the development of the region. Therefore, it does not meet Criterion A. Research did not reveal that the bridge is associated with individuals who made significant contributions to history as required under Criterion B. Under Criterion C, the bridge is a common example of a double box girder prestressed concrete bridge. A bridge type introduced in railroad engineering and design in the early 1950s. It lacks high artistic values and research did not reveal it was designed by a master engineer. In consideration of all the elements of Criterion C, this bridge is not significant. As a built environment resource, it is not the sole source of important information to history and does not meet Criterion D.

In addition to not meeting the NRHP evaluation criteria, the loss of 90 feet of the bridge has impacted its integrity of design, materials, and workmanship. Integrity of materials was previously affected by the repairing and replacing of ties and some ballast tamping (Lustig 2021b). It retains integrity of location, setting, feeling, and association.

An archaeological evaluation surrounding the bridge location has not been performed to date. That said, Sespe Creek is a highly active watercourse with demonstrated high-energy scouring events, indicating that the likelihood of *in situ* archaeological materials remaining in the immediate vicinity of the bridge is extremely low to non-existent. Construction efforts associated with repair or replacement of the VCTC Sespe Creek Bridge presents little to no risk to archaeological resources.

## 6. Conclusion

The Sespe Creek Overflow Bridge, constructed in 1969, lacks historical and engineering significance and integrity. Based on the present evaluation, the bridge is recommended not eligible for listing in the NRHP. While this report presents preliminary findings only, adequate information has been presented to recommend a finding of **no historic properties affected** for the project under Section 106. This memorandum further concludes there are no further management recommendations needed.

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SPBL-2025-01

# SESPE CREEK OVERFLOW RAILROAD BRIDGE REPAIR

## **EXHIBIT F**
WATER DIVERSION GUIDE

# WATER DIVERSION GUIDE

## FOR THE

## VENTURA COUNTY
## MAINTENANCE PROGRAM EIR

## VENTURA, CALIFORNIA

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# 1.0 INTRODUCTION

## 1.1 BACKGROUND

The Ventura County Watershed Protection District's (District) ongoing maintenance program focuses on the proper operation and function of the District's flood control facilities. Routine maintenance and repair activities preserve the engineered flow conveyance and retention capacities of the District's flood control facilities and prevent/remove the accumulation of obstructing vegetation and sediments that could increase existing flood or erosion hazards.

This Water Diversion Guide was developed in conjunction with the 2008 Maintenance Program Environmental Impact Report (Program EIR) to address potential impacts to water quality and aquatic habitat during routine maintenance and repair activities. This guidance provides detailed Best Management Practices (BMPs) for the District and its contractors to use during water diversion activities to reduce environmental impacts to hydrology, water quality, and aquatic habitat.

## 1.2 PURPOSE

During routine maintenance and repair operations, flowing or ponded water may be present at a flood control facility. Water flowing through work areas can potentially impact downstream water quality through the discharge of sediment, debris, construction materials and other pollutants. Construction activity may also impact water quality or native aquatic life by altering flow channels and hydrology, mechanically damaging aquatic habitat or contributing to siltation and turbidity.

Temporary water diversion is required during a routine maintenance or repair activity when work in flowing or ponded water has the potential to negatively impact water quality or native aquatic life. A water diversion facility must be constructed, operated, maintained, and removed to minimize impacts. BMPs implemented as part of the water diversion reduces water quality impacts by minimizing the discharge of sediments and other pollutants from the work area. BMPs for the protection, removal, and relocation of native aquatic life during water diversion reduce impacts to aquatic life. Water quality monitoring is usually required during the operation and removal of a water diversion. The results of water quality monitoring can be used to assess the performance of BMPs and address any potential impacts to water quality from the water diversion.

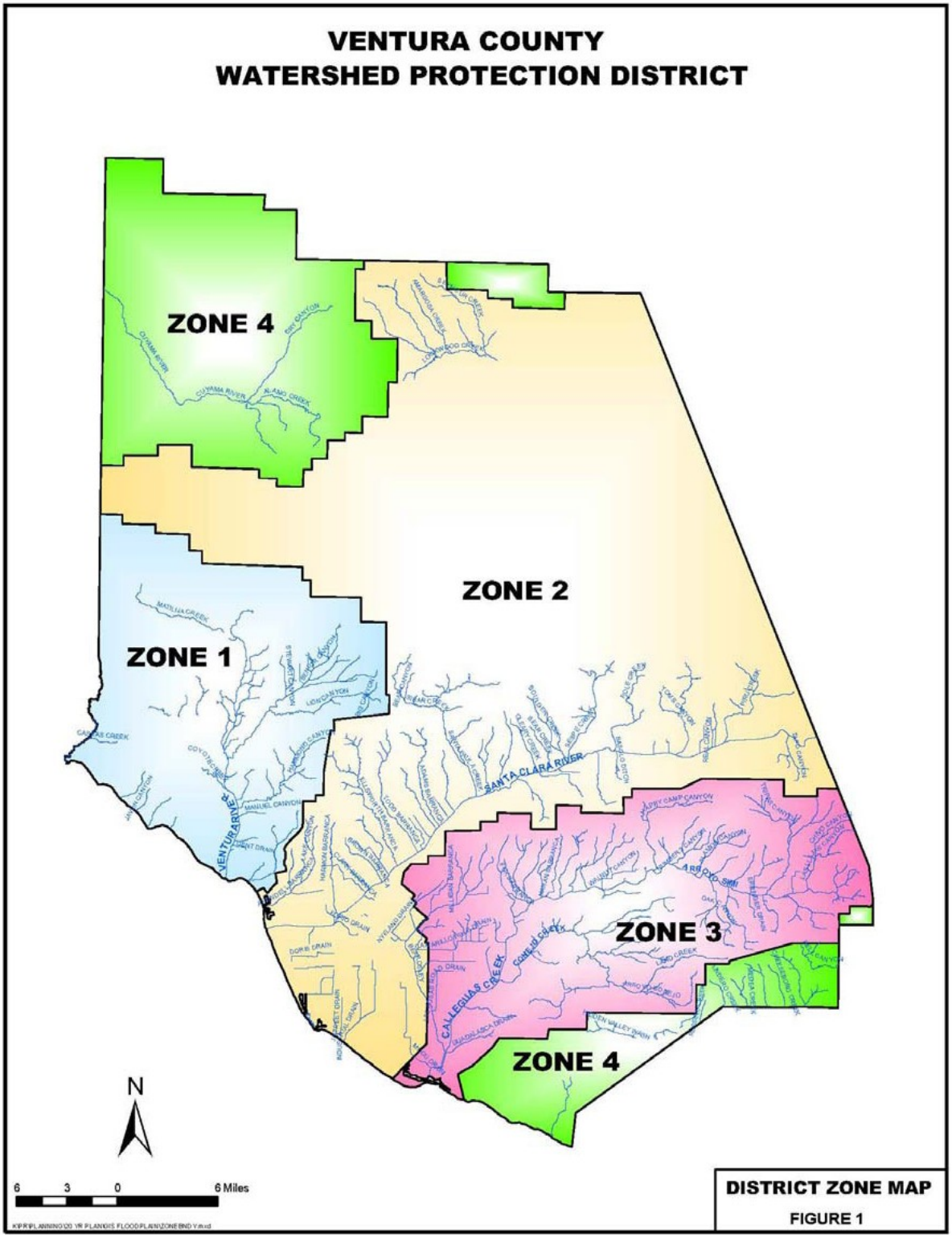
## 1.3 DISTRICT ZONES

The District operates and maintains projects that have been either constructed by the District or constructed by others and transferred to the District. The District has divided Ventura County into four management zones (Table 1-1 and Figure 1).

## TABLE 1-1
## SUMMARY OF DISTRICT ZONES

| Zone No. | Watershed | Major Drainages | Cities and Communities |
|---|---|---|---|
| 1 | Ventura River Watershed | Ventura River, San Antonio Creek, tributaries in the Ojai Valley | Ojai, Ventura, Oak View, Casitas Springs, Live Oak Acres, Meiners Oaks |
| 2 | Santa Clara River Watershed and Oxnard Plain | Santa Clara River and its tributaries, various Oxnard Plain drains | Piru, Fillmore, Santa Paula, Ventura, El Rio, Saticoy, Oxnard, Port Hueneme, Nyeland Acres |
| 3 | Calleguas Creek Watershed | Arroyo Conejo, Arroyo Simi, Arroyo Santa Rosa Creek, Conejo Creek, Arroyo Las Posas Calleguas Creek, Revolon Slough | Simi Valley, Moorpark, Camarillo, Thousand Oaks, Newbury Park, Somis |
| 4 | Potrero Creek Watershed, Upper Cuyama River Watershed | Potrero Creek, Medea Creek | Agoura Hills, Westlake Village |

**FIGURE 1**
**DISTRICT MANAGEMENT ZONES**



# 2.0 FACILITY TYPES AND DESCRIPTIONS

A variety of basin and linear facilities are maintained by the District. A comprehensive list of the District's facilities and their location, dimensions, capacities, and other pertinent information is included in the District's Catalog of Facilities (2008 Environmental Protection Measures for the ongoing Routine Operations and Maintenance Program EIR, Appendix C, periodically updated) and the Debris and Detention Basin Manual (EIR Appendix D, updated December 2017). The main types of linear facilities are Open Channel; Open Channel Inlets, Outlets, and Transitions; Bank Protection and Related Facilities; and Pipe and Box Culverts (Underground Facilities). There are about 216 miles of maintained linear facilities with open channels accounting for one-half of the total. There are 56 debris and detention basins that are maintained by the District.

## 2.1 OPEN CHANNELS

### 2.1.1 Channel Types

More than 50 percent of the District's linear facilities are some type of open channel. The most abundant type is the reinforced rectangular or trapezoidal concrete channel. This is a fully lined concrete structure with either a trapezoidal or rectangular (vertical wall) channel geometry. Some of the open channels are graded, earthen channels or unlined channels, while others are grouted (i.e., concreted) riprap channels with earthen bottoms. Channel geometries for earthen channels are usually trapezoidal.

Open channels in the District can be categorized as "improved" or unimproved" channels. Improved channels have been designed for a specific storm flow conveyance capacity, with engineering drawings that specify a certain width and depth. Most "improved" channels are fully or partially lined with concrete. "Improved" earthen channels have design dimensions that must be maintained. "Unimproved" channels are full earthen channels or channels with bank protection (i.e., riprap, gunite) and a soft bottom that do not have engineered design specifications but are maintained to specific configurations as part of the District's ongoing maintenance program.

### 2.1.2 Maintenance Activities in Channels

Several types of routine maintenance and repair operations are conducted by the District on an annual basis. Any of these activities can occur at a facility with flowing or ponded water that would require a water diversion and appropriate BMPs.

#### 2.1.2.1 Channel Cleanout

The District is the Principal co-permittee of the Ventura Countywide NPDES Permit and responsible for implementation of the Ventura Countywide Stormwater Quality Management Program (VCSQMP) [1]. The VCSQMP requires co-permittees to routinely clean catch basins, drainage facilities, detention/retention basins, and reinforced concrete open channels at least once each year prior to the wet season. At most sites, sediments are removed from the channel bottom using an excavator or a crane working from the top of the banks.

[1] The Ventura Countywide Stormwater Quality Management Program (VCSQMP) complies with the requirements of the Ventura Countywide National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit (Order R4-2010-0108; NPDES Permit No. CAS004002) issued by the Los Angeles Regional Water Quality Control Board (RWQCB).

#### 2.1.2.2 Channel Bed and Bank Repair

Repair activities include the re-shaping and compaction of earthen channels to repair erosion damage, replacement of damaged concrete in lined channels and other in-kind replacement bank protection. Minor additions of rock riprap and/or concrete may occur in locations with repetitive scour or erosion damage. These types of repairs do not substantially alter the facility footprint or change the type of construction.

## 2.2 DEBRIS AND DETENTION BASINS

The District operates and maintains 56 debris and detention basins. The number, location, and capacity of the District's detention basins are provided in the VCWPD Debris and Detention Basin Manual. They are typically located in headwaters above developed areas. The basins are usually formed by the construction of an earthen dam that may or may not have rock facing. If basin volumes or dam designs exceed certain state criteria, they are regulated by the California State Division of Safety of Dams (DSOD). State-size facilities store more than 50 acre-feet of water or have dams that are more than 25 feet high.

### 2.2.1 Debris Basins

Most of the District basins are "debris basins" which capture large debris (sediment, boulders, trees, etc.) during winter storms. These types of basins function by allowing flood waters to pond in the basin, thereby slowing water velocity so that debris and sediment settle out in the basin.

### 2.2.2 Detention Basins

The District maintains several "detention basins," which detain large volumes of water during the early phases or peak of a storm event, then slowly release the water over time. These basins reduce the peak downstream flows, which reduces flooding.

### 2.2.3 Maintenance Operations

Basins require a certain storage volume to perform in accordance with the design criteria. As sediments accumulate, the design storage volume is decreased, and the basin will not function as designed. Hence, sediments must be removed to maintain the design volume. Basins are cleaned on an as-needed rather than annual basis. A debris basin "cleanout" occurs in advance of each upcoming rainy season and/or immediately following the rainy season if any sediment and debris have accumulated to fill approximately 25% of the design capacity. If the watershed upstream of the basin is burned in the preceding five years, the basins will be cleaned in advance of the rainy season and may be cleaned several times per year until the vegetation in the watershed recovers.

# 3.0 ASSESSING FIELD CONDITIONS

Prior to a maintenance or repair activity in a channel or basin with ponded or flowing water, the District or its contractor will determine the need for a water diversion, the appropriate type of water diversion and appropriate BMPs for the activity. This requires the District or its contractor to perform a pre-construction assessment of field conditions, including the type of facility, flow conditions and the potential for aquatic habitat.

## 3.1 ASSESSMENT OF FLOW CONDITIONS

### 3.1.1 Open Channels

Some open channels within the District have year-round or perennial flow. Most substantial flows occur in the channels during and immediately following rain events. However, water can be present year-round due to "nuisance" discharges from storm drains, high ground water seeping from "weepholes" in concrete lined channels and agricultural return flows. Some channels have perennial flows due to permitted discharges from water or wastewater treatment plants.

Although the rainy season runs approximately from October to April, intermittent flows can be present any time of the year due to urban or agricultural discharges or monsoonal storms. Provisions for water diversions should always be incorporated into project planning. For coastal facilities, the influence of tidal flows will need to be taken into consideration.

Water diversion and incorporation of appropriate BMPs during a routine maintenance or repair operation in an open channel is indicated under the following flow conditions:

- The maintenance or repair activity is to be conducted in the rainy season between October and April.
- The channel is normally dry, but intermittent urban or agricultural discharge may occur.
- The channel conveys tidal flows or is tidally influenced,
- The channel conveys perennial flows from either man-made or natural upstream sources.
- Flow or ponded water is present in an earthen bottom channel.
- Flows or ponded water within a concrete-lined channel are 2 inches or deeper. Routine cleaning of dry or nearly dry concrete lined channels with less than 2 inches of water is conducted with downstream BMPs (e.g. wattles) to prevent turbidity.

### 3.1.2 Debris and Detention Basins

A water diversion is needed in a debris or detention basin when water is either flowing into the basin or ponded within it and the maintenance activity will potentially impact downstream water quality or aquatic habitat. Water may be ponded within a basin due to groundwater seepage or retained storm flows. A water diversion with appropriate BMPs is indicated for routine maintenance under the following flow conditions:

- Water is flowing or may flow into the basin from an upstream source.
- Water is ponded within the basin.

## 3.2 ASSESSMENT OF POTENTIAL AQUATIC HABITAT

Most District flood control facilities in the District are managed to minimize riparian, wetland, and aquatic habitat. However, measures must be taken during water diversions to protect aquatic habitat and species if they are present. Facilities that convey flows for sensitive species are identified in the Catalog of Facilities (Table 3-1).

A biological survey must be conducted by a qualified biologist for facilities with potential habitat for native aquatic species prior to initiation of the water diversion and any maintenance or repair activity. Prior to initiating work the District must determine if the following conditions that may require a biological survey are present at the facility:

- The facility may support special status species (Table 3-1).
- The facility supports wetland or riparian vegetation, or aquatic wildlife, or these resources occur downstream.
- The facility is an earthen bottom channel or debris basin with ponded or flowing water.
- The facility conveys perennial or intermittent flows from a man-made or natural upstream source.
- The facility conveys tidal flows or flows that are tidally influenced.
- The facility is a concrete-lined channel conveying flows deeper than two inches.

Prior to initiating work, if the District or its contractor observes the above conditions at a facility with flowing or ponded water, the District will assign a qualified biologist to conduct the biological survey.

**TABLE 3-1**
**WATERSHED SUMMARY OF POTENTIAL SPECIAL STATUS SPECIES**

| Watershed | Zone | Aquatic Sensitive Species with Potential to Occur |
|---|---|---|
| Ventura River | 1 | California Red-Legged Frog, Southwestern Pond Turtle, Southern Steelhead, Tidewater Goby |
| Santa Clara River | 2 | Arroyo Toad, Southwestern Pond Turtle, Southern Steelhead, Tidewater Goby |
| Calleguas Creek | 3 | Arroyo Chub, Southwestern Pond Turtle |
| Malibu Creek | 4 | Southwestern Pond Turtle |

If the pre-construction biological survey indicates that the facility or reach downstream of the facility has the potential for native aquatic habitat, BMPs for the protection of aquatic life must be implemented as part of the water diversion. BMPs for the protection and relocation of aquatic life are included in Section 5.6 of this document and additional recommendations or requirements may be provided by the qualified biologist as part of the survey.

If the biological survey indicates the potential presence of a threatened, endangered, or sensitive aquatic species, District requirements for the protection of listed species must be implemented as

required under the District's biological opinion and take permit for that species or other appropriate documentation.

## 3.3 GROUNDWATER DEWATERING

A high-water table is usually associated with a basin but may also occur within channels. Maintenance and repair activities requiring excavation below the water table require groundwater dewatering to maintain a dry work area. The RWQCB prohibits activities involving wet excavations (i.e., excavations below the seasonal high-water table) unless authorized by an NPDES or Waste Discharge Requirement.

To comply with the requirements established by the Los Angeles RWQCB for groundwater dewatering, the following applies to maintenance or repair activities requiring excavation.

- In non-coastal areas, groundwater tables fluctuate seasonally, and high groundwater may be avoided by scheduling maintenance and repair activities in the dry season.
- A minimum 5-foot buffer zone must be maintained above the existing activities, unless authorized by RWQCB.
- If groundwater dewatering is proposed or anticipated, the District will file a Report of Waste Discharge to the RWQCB and obtain any necessary NPDES permits/ Waste Discharge Requirements prior to discharging groundwater to a waterway.
- If groundwater is encountered without the benefit of appropriate permits, the District or District contractor will cease all activities in the areas where groundwater is present until the RWQCB is notified and the necessary NPDES permits/Waste Discharge Requirements are obtained.

# 4.0 WATER DIVERSION METHODS

## 4.1 WATER DIVERSION COMPONENTS

The purpose of water diversion is to prevent flowing or tidal waters from entering a work area. In general, the work area may be isolated by the impounding of flows behind a coffer dam or within an in-stream excavated basin. Flows from the coffer dam or excavated basin are routed around or through the work area by a bypass system. The bypass system may consist of a pipeline, excavated channel, lined flume, or a bermed portion of the existing channel. Because of the potential of the water diversion to impact water quality and potential aquatic life, appropriate BMPs must be incorporated into the design and operation of the water diversion. Water diversion design and planning must typically consider the following:

- Design and construction of cofferdam or excavated basin
- Design of bypass system
- Management of sediment
- Bypass outlet
- Water quality monitoring
- Protection of aquatic species and habitat
- Equipment and website use

## 4.2 COFFERDAMS

### 4.2.1 Types of Cofferdams

Temporary cofferdams are used to keep flowing or ponded water out of facility work areas. Cofferdams are used with bypass systems to divert water either around or through the work area. Cofferdams can be generally categorized as transverse or longitudinal, and with or without tidal conditions (Figure 2). BMPs for the design and construction of cofferdams are provided in Section 5 of this document.

Coffer dams may be constructed of sandbags or native earthen materials wrapped in visqueen, inflatable dams, compacted earth, brick and mortar, or k-rails. In earthen bottom channels, coffer dams may be constructed from materials excavated from the temporary low-flow channel. Inflatable dams (e.g., bladders) should only be used in channels/waterways that have a relatively flat substrate (i.e., concrete lined channels or similar). Pipes (with or without rubber donuts or sandbags) should not be placed beneath the bladder. In addition, sandbag cofferdams are ineffective at preventing water seepage unless plastic (e.g., visqueen) is placed underneath.

As described in Section 5.7.3, no wet concrete product shall encounter any flowing or standing water at any time to avoid pH water quality impacts. Areas where raw cement or grout are applied or where concrete curing or finishing operations are conducted to construct a cofferdam shall be separated from any ponded or diverted water flows until fully dried/cured. All equipment involved with the concrete or grouting operations shall be located within a contained area while using any slurry or concrete product.

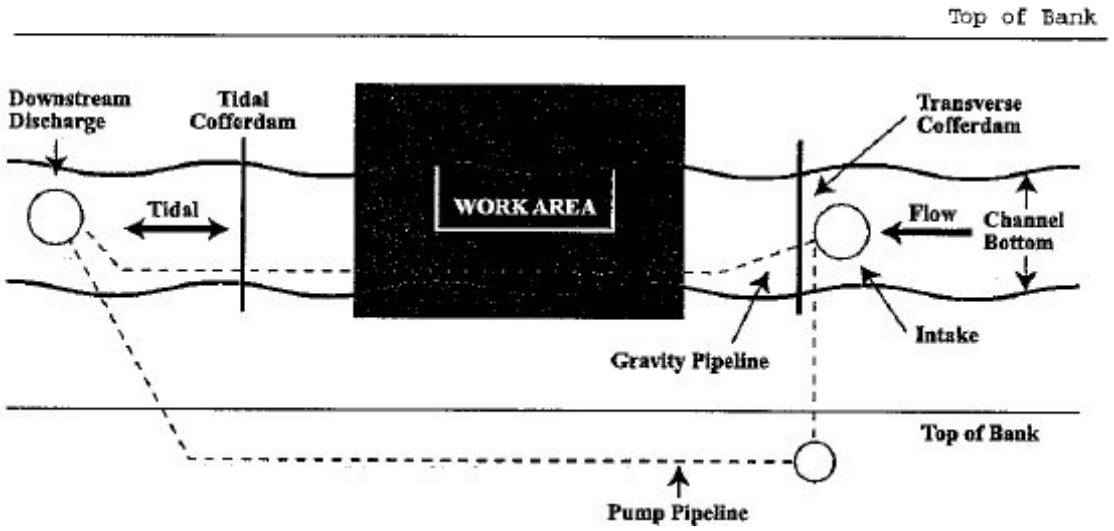
### 4.2.1.1 Transverse Cofferdam

Transverse cofferdams are used in channels or basins to span the entire cross-section of the facility upstream of the maintenance or repair activity. Water is impounded upstream of the cofferdam and a bypass system is used to route flows through or around the work area.

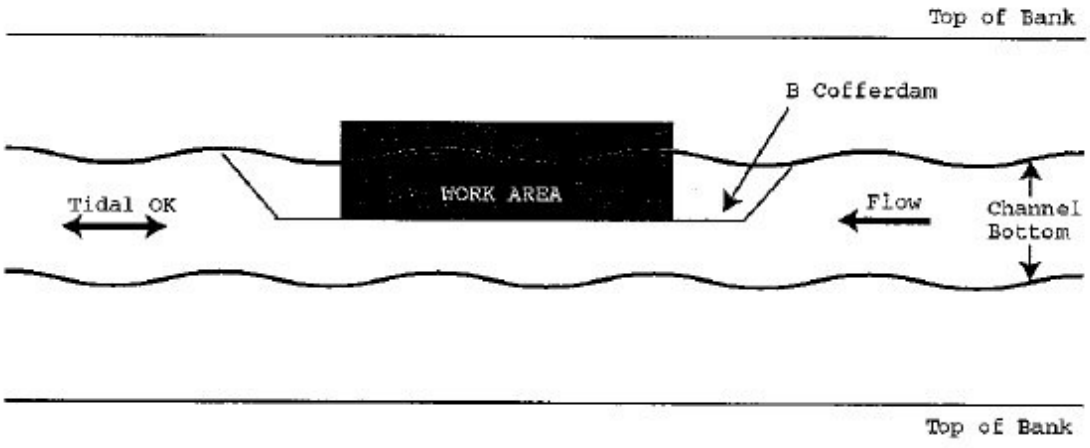
### 4.2.1.2 Longitudinal Cofferdam

A longitudinal cofferdam allows work to proceed in a portion of the channel while allowing natural flow to continue along the remaining part of the channel. Longitudinal cofferdams are typically constructed parallel to the channel or basin banks. Water quality monitoring is not required when the flow is simply moved to one side of the channel using a longitudinal cofferdam and bypass system as shown below.

**FIGURE 2**
**COFFERDAM AND BYPASS SYSTEMS**
**Plan View of Transverse Cofferdam and Bypass System**




**Plan View of Longitudinal Cofferdam and Bypass System**



#### 4.2.1.3 Tidal Cofferdams

In channels that convey tidal flows or are tidally influenced, transverse or longitudinal cofferdams may be constructed. A transverse coffer dam in a tidally influenced channel may require a cofferdam both upstream and downstream of the work area. The downstream transverse cofferdam must be constructed at a height adequate to retain tidal flows and must be sturdy enough to withstand tidal surge. If a longitudinal cofferdam is constructed, the bypass channel must have adequate flow capacity to accommodate tides. Tidal cofferdams should be installed and removed at low tide.

## 4.3 BYPASS SYSTEMS

Bypass systems are used to divert water impounded by an upstream cofferdam around or through the work area. Bypass systems typically consist of pipelines, excavated low-flow channels or constructed channels or flumes. A berm constructed in the channel bottom may also be used to route low flows around the work area. Selection of a bypass system design depends on the type of facility and activity, cofferdam design, flow conditions, and presence of aquatic habitat.

Transverse and tidal cofferdams diversions typically incorporate a pipeline to convey water through the work area. The pipeline may operate by gravity flow or require water to be pumped. Low flow conditions or channel geometry in an earthen bottom channel may require the excavation of an upstream basin and standpipe to facilitate pumping (Figure 3).

**FIGURE 3**
**INTAKE CONFIGURATIONS**


Bypass systems for longitudinal cofferdams may consist of an open channel formed by the cofferdam or berm, an excavated low-flow channel adjacent to the work area, a constructed open flume, or a pipeline.

Outlet protection may be required as part of a bypass system to reduce the velocity and energy of concentrated flows by placing temporary devices or rock at pipe outlets. Outlet protection helps prevent scour in earthen bottom channels and prevents erosion and reduces turbidity.

# 5.0 WATER DIVERSION BEST MANAGEMENT PRACTICES

## 5.1 GENERAL WATER DIVERSION BMPS

### 5.1.1 Maintenance and Repair Planning

Prior to maintenance and/or repair activities, the District must determine if a water diversion is necessary and incorporate any water diversion into pre-project planning. Planning for water diversions during maintenance and repair activities should incorporate and identify the following:

- A pre-maintenance biological survey must be conducted by a qualified biologist for facilities with potential habitat for native aquatic species prior to initiation of the water diversion and any construction work (Section 3.2).
- Proposed cofferdam construction methods, materials, and installation, maintenance and removal requirements.
- Identification of erosion control BMPs, including methods, materials, and installation, maintenance and removal requirements.
- A map or drawing indicating the location of cofferdams, type and location of bypass system, anticipated water retention depth, cofferdam height, and location of downstream discharge point.
- Location of proposed upstream and downstream water quality monitoring sites.

### 5.1.2 Operation and Maintenance

- The water diversion and work area dewatering system must be in place and functional before in-channel work can begin.
- While the water diversion is in place, it must be operational 24 hours a day.
- Inspection and maintenance of the water diversion and associated erosion and sediment control BMPs should be conducted daily.
- Maintenance and/or repair activities shall not be conducted during a rainfall event.
- During cofferdam operation, all water from upstream shall always be allowed to pass downstream to maintain aquatic life below the water diversion.

### 5.1.3 Removal Post-Maintenance

- The cofferdam, bypass system, and erosion control will be removed when the work is completed. Removal normally proceeds downstream in an upstream direction.
- Remove temporary fill as appropriate, such as access ramps diversion structures or earthen cofferdams. Earthen material excavated from the channel bottom for the construction of temporary in-channel berms or channels may be left in place with recontouring to allow proper flows post project.
- Normal flows should be restored to the affected stream immediately upon completion of work.

## 5.2 COFFERDAMS

### 5.2.1 General Design Considerations for Cofferdams

- Cofferdams will be designed with adequate height to retain dry weather flows and anticipated storm flows or be removed prior to storms.
    - Cofferdam height for non-tidally influenced channels should generally be higher than the normal high-water mark.
    - Cofferdam height is to be established by the District based on facility dimensions and conditions, existing flow conditions, time of year, and other pertinent factors.
- Cofferdam construction will be adequate to prevent seepage into or out of the work area.
- Cofferdams may be constructed from sandbags wrapped in visqueen, inflatable dams, compacted earth, brick and mortar, k-rails, or other appropriate material.
- Seepage shall be prevented to the extent feasible using plastic (e.g., visqueen) or sealants.
- Cofferdams constructed of earth or other erodible materials will be enclosed by erosion control measures, such as filter fabric, silt-fencing, or other appropriate materials.
- Materials used for the construction of earthen cofferdams will not incorporate contaminated sediments; i.e., concrete, pavement, trash, or debris.
- Longitudinal cofferdams in low-flow channels may be constructed from alluvium excavated from the channel and compacted on-site.

### 5.2.2 Inspection and Maintenance

- Inspect all system components twice a day.
- Check for water seepage under the dam and general integrity of the dam, repair as needed.
- Repair all leaks immediately.
- In concrete-lined facilities, the upstream water collection pool shall be cleaned and cleared of sediment and debris regularly to prevent water quality deterioration.
- Clean all debris, dust, loose materials from the work area daily.
- Place wattles, filter fabric, and silt fencing across the flow stream downstream of the work area to catch/filter water in case it is unintentionally discharged the work area:
- Clean water intake to prevent/correct clogging.

### 5.2.3 Removal

- Once project work is complete, reintroduce water into the channel in a manner that avoids turbidity.
- Remove imported construction materials.
- After removal of the cofferdam, dismantle the bypass system and restore disturbed area to pre-construction grades.
- Flows in an earthen bottom channel may be left within the temporary low-flow channel if re-introduction of the flows to the work area would result in excessive discharge of sediment downstream.

## 5.3 BYPASS SYSTEMS

### 5.3.1 General Considerations for Bypass Systems

- Flows within the bypass will be maintained to the greatest extent feasible in order to maintain adequate water quality and quantity to support fish and other aquatic life.
- During the water diversion, the following upstream and downstream monitoring will be conducted:
    - pH, temperature, dissolved oxygen, turbidity, and total suspended solids (and/or other constituents as required by current permits) monitoring will be implemented.
    - Monitoring will generally be conducted daily during the first week of diversion activities, and then on a weekly basis, thereafter, until the in-stream work is complete.
    - Results of the analyses will be retained by the District and submitted to regulatory agencies as required.

### 5.3.2 Open Channel Bypass Systems

- An open channel bypass will be protected from erosion or spillage of material from channel and basin banks and slopes using readily available BMPs.
    - BMPs include the placement of filter fabric, silt fencing, straw bales, sandbags on cofferdam banks, channel banks, and slopes.
- An upstream silt catchment basin may be constructed so that silt or other deleterious materials are not allowed to pass into the open channel. The silt catchment basin should be monitored and cleaned/repaired weekly.
- For facilities that support sensitive species or in perennial streams, an open bypass channel or flume may be required in conjunction with a longitudinal cofferdam.

### 5.3.3 Pipeline Bypass Systems

- Bypass systems with pipelines may be gravity flow or pumped as necessary.
- When using a gravity flow system, the pipeline must slope continuously downgrade and, therefore, may have to pass through or near the work area.
- Intakes and/or excavated basins may be required for gravity flow or pump-fed bypass systems (see Figure 3).
    - Turbulence around the intake and associated turbidity can be reduced by means of ponding water behind the cofferdam or in an excavated sump.
    - In earthen bottom channels or basins, the intake pipe end should be substantially above the bottom of the ponded water or excavated basin as shown in Figure 3 to avoid discharge of sediments.
    - For gravity systems, a standpipe arrangement is very effective (see Figure 3). An intake filter can also be used to screen out sediment but can be easily clogged.
    - All intakes systems with pumps must be fitted with screens.
- Outlet protection should be incorporated at the pipe outlet to prevent generation of turbidity erosion, and scour. Refer to Outlet Protection BMPs in this Section.
- As dry weather flows vary, the contractor may select the proper size pump in the field. A backup pump should be provided.
- Bypass pipes have the potential to heat the water and may require shading to prevent temperature increases in diverted water.

## 5.4 SEDIMENT CONTROL ACTIVITIES

- Work areas, channel banks, or stockpile areas adjacent to the water diversion area that could be subject to erosion during storm events will be stabilized with erosion control measures.
    - Appropriate erosion control materials include silt fencing, sandbags, filter fabric, coir rolls, or wattles.
    - In low flow channels, an upstream silt basin may be constructed so that silt or other deleterious materials settle out before passing through the water diversion area.
    - Erosion control methods used to prevent siltation should be monitored and cleaned/repaired weekly.
- Sediment may be discharged downstream as a result of returning flows to the original low-flow channel:
    - When returning flows, minimize the discharge of sediment by installing filter fabric, wattles, or silt fencing downstream of the work area.
    - Bypass flows should be introduced into the dewatered area at the lowest velocity possible to minimize potential erosion and turbidity.
- Water diversions are not typically used by the District during clean-outs of concrete-lined channels devoid of fish or aquatic life where flows are minimal (less than 2 inches deep) and channel widths are narrow (25 feet or less). In low-flow concrete-lined channels, the District uses small bulldozers or "bobcats" working upstream to downstream within the channel bottom to scrape sediment, trash, and debris into piles for collection. In-stream BMPs typically used by the District for this type of channel clean-out include primary and secondary placement of wattles (net-wrapped coir rolls/wattles) downstream of the work area across the channel width. In low-flow conditions, 6-inch diameter wattles are adequate to contain and filter flows within a concrete-lined channel. Proper placement and removal of the wattles prevents the discharge of sediment and debris downstream of the work area.

## 5.5 OUTLET PROTECTION

- Place effectively sized outlet protection underneath pipeline outlet of where diverted water is discharged into stream.
- Rock aprons are the most common type of outlet protection for high flows; however, erosion control fabric, wattles, or silt fencing may be installed at the outlet to provide additional velocity reduction.
- Energy dissipation or other protection may not be necessary if the discharge is to an existing hardened structure (culvert, riprap, or concrete), to deep water or a heavily vegetated area.
- When designing the outlet project, consider flow depth roughness, gradient, side slopes, discharge rate, and velocity.
- If the discharge is to a tidal area, it may be necessary to equip the discharge pipe with a flap gate to prevent tidal flows from backing up into the intake.

## 5.6 AQUATIC LIFE PROTECTION MEASURES

If the results of the pre-construction biological survey indicate that the facility has the potential for native aquatic life, protective measures shall be taken during water diversions to prevent entrapment and mortality of fish and amphibians. If the survey determines that the aquatic life present at the site is and will be only composed of invasive or exotic species, no further action to protect aquatic species during the water diversion is necessary.

The following are minimum measures to be undertaken to protect native aquatic life during the construction, operation, and removal of a water diversion. During construction of the water diversion and during removal, a qualified biologist will be onsite to oversee measures undertaken to prevent entrapment and mortality of native aquatic life. Recovery and replacement of aquatic life may be undertaken by personnel under the supervision of the qualified biologist. For listed and sensitive species, only a qualified biologist with the proper permits may conduct such activities.

### 5.6.1 Prior to Cofferdam Construction

- Prior to construction of cofferdams, the channel section shall be isolated at the upstream and downstream ends and aquatic organisms removed and relocated by a qualified biologist.
    - Block nets shall be secured upstream and downstream of the channel section fully spanning the cross section of flow.
    - Block nets shall be secured into the substrate in soft channel bottoms or weighted across the channel cross section in hard bottom channel.
    - A seine net shall be used within the isolated area to recover fish, macro-invertebrates, and amphibians under the direction of the biologist.
    - Recovered aquatic life may be placed and transported in water-filled buckets to be released downgradient of the work site.
    - A minimum of three full channel sweeps should be conducted to remove aquatic organisms prior to commencement of dewatering.
    - Alternatives to seine netting, such as electro-shock must be approved by CDFW/NMFS first and then implemented by the site biologist.
    - After initial seine netting and removal of aquatic life, cofferdams may be constructed within the area isolated by the block nets.

### 5.6.2 Protection of Aquatic Life During Bypass Operation

- Pump inlets and outlets shall be protected using an appropriate mesh screen:
    - Mesh size will be based on protection of smallest native fish or amphibian species as established by field survey.
    - Default mesh size is 5 mm.
- Bypass pipelines will be adequately sized to pass flows and maintain existing water flows downstream of the work area.

### 5.6.3 Dewatering of Work Area

- Seine nettings of organisms shall continue during dewatering of the dry work space under supervision of the qualified biologist.

- All block nets should be periodically checked for impingement of fish or other wildlife and cleaned of debris to avoid collapse.

### 5.6.4 Maintaining Flow Through Work Site

- For water diversions where an open flow channel is maintained or an alternative flow channel is excavated, measures shall be taken to ensure that adequate flows are maintained and that aquatic organisms are not trapped or stranded.
- Flow downstream of the work site shall be maintained during construction and operation of the cofferdams.
- A downstream coffer dam shall be constructed in tidal areas for downstream flow protection (water surges upstream of the work area have occurred unexpectedly at times; water may overtop the upstream coffer dam and enter the work area).

### 5.6.5 Re-establishing Flows Post-construction

- During flows into an existing channel from a temporary channel, the qualified biologist shall survey the de-watered temporary channel to ensure that aquatic organisms are not trapped or stranded.
    - Trapped or stranded organisms will be placed in water-filled buckets for transport and release into the existing flow channel.
    - Applicable to diversions in soft bottom channels: if aquatic life has established itself within a temporary channel during the time of construction, flows may be left within the temporary channel.

## 5.7 EQUIPMENT AND VEHICLE USE

### 5.7.1 Equipment Operation

- Stationary equipment such as motors, pumps, generators, and welders located within or adjacent to the channel or basin will be positioned over adequately sized secondary containment.
- Access to the work site via existing roads and access ramps will be shown on the project plans. If no ramps are available in the immediate area, a temporary ramp may be constructed within the flagged work area. Any temporary ramp will be removed upon completion of the project.

### 5.7.2 Equipment Maintenance During Construction

- Any equipment or vehicles driven and/or operated within or adjacent to the channel or basin should be checked and maintained daily, to prevent leaks of materials that could be deleterious to aquatic life if introduced to water. All maintenance will occur in a designated offsite area. The designated area will include a drain pan or drop cloth and absorbent material to clean up spills.
- Fueling and equipment maintenance will be done in a designated area removed from the area of the channel or basin such that no petroleum products or other pollutants from the equipment may enter these areas via rainfall or runoff. The designated area will include a drain pan or drop cloth and absorbent materials to clean up spills.

### 5.7.3 Spill Prevention, Control, and Containment

- Prior to maintenance or repair activities, the District or Contractor will identify the methods, materials, and procedures for spill prevention, control, and containment. This information will be incorporated into the contract documents. Spill containment methods should address the types of materials and equipment to be used at the site. Materials for the containment of spills (i.e., absorbent materials, silt fencing, filter fabric, coir rolls) should be identified and be available onsite prior to commencement of maintenance and/or repair activities.
- Any accidental spill of hydrocarbons or coolant that may occur within the work area will be cleaned immediately. Absorbent materials will be maintained within the work area for this purpose.
- No wet concrete product will encounter any flowing or standing water at any time. Areas where raw cement or grout are applied or where concrete curing or finishing operations are conducted will be separated from any ponded or diverted water flows by a cofferdam or silt-free, exclusionary fencing. All equipment involved with the concrete or grouting operations will be located within a contained area while using any slurry or concrete product. The protective berm or other structure will be in place prior to maintenance and/or repair activities.
- Any spill of the grout, concrete curing, or wash water adjacent to or within the work area will be removed immediately.
- During concrete spill clean-up operations and until cessation of maintenance and/or repair activities, pH monitoring will be conducted daily upstream and downstream of the spill site. The results of post-spill pH monitoring will be submitted to the District and kept with the contract documents.
- If vacuum trucks are used to clean up a spill into ponded or diverted water, the vacuum hose should be placed in a 3-to-4 square foot area and protected on all sides by exclusionary fencing to prevent the migration of contaminants. The intake of the vacuum hose should be protected with 5 mm mesh screen to prevent uptake of aquatic life or as determined by regulatory permits.

# 6.0 REGULATORY SUMMARY

Many of the District's facility maintenance activities occur in watercourses or basins where such activities are regulated by state, federal, or local agencies. The District obtains both individual project permits as well as long-term permits to address routine maintenance and repair activities. This section of the Guidance describes the applicable regulatory authorities and permit requirements for the maintenance program.

## 6.1 FEDERAL AGENCIES

### 6.1.1 U.S. Army Corps of Engineers

Activities that result in the discharge of dredged or fill material in natural watercourses (such as bank stabilization and channel shaping) are regulated by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Most of the District's maintenance and repair activities are permitted under Nationwide Permits (NWP) No. 3, No. 31, and No. 33. Alternatively, maintenance actions in this program may be authorized under a Regional General Permit or Individual Permits.

### 6.1.2 U.S. Fish and Wildlife Service and National Marine Fisheries Service (NMFS)

The requirements of the Endangered Species Act (ESA) apply to any project permitted under a CWA Section 404. An ESA Section 7 Incidental Take Permit is needed if action taken for a project would have the potential to adversely affect listed species or designated critical habitat, either directly or indirectly. Section 7 consultation process takes place concurrent with the Section 404 permit review process. Facilities that convey flows for sensitive species are identified in the Catalog of Facilities.

## 6.2 STATE AGENCIES

### 6.2.1 Regional Water Quality Control Board

The Regional Water Control Board (RWQCB) Los Angeles Region administers both the Section 401 Water Quality Certification Program and programs under Section 402 of the CWA, including the National Pollutant Discharge Elimination System (NPDES) in Ventura County.

#### 6.2.1.1 Section 401 Water Quality Certification

The RWQCB requires a Section 401 Water Quality Certification for any activity undertaken under a Section 404 permit. Projects that require water diversions during maintenance and/or repair activities are required by the RWQCB to submit a separate Water Diversion Plan. This Update to the District's 2007 Water Diversion Guide incorporates measures in compliance with the current Section 401 certification requirements for water diversions undertaken by the District. .

#### 6.2.1.2 Section 402

Section 402 of the Clean Water Act governs the NPDES which regulates point source discharges to waters of the United States. The RWQCB issues both NPDES permits for point source discharges to surface water and groundwater.

A maintenance or repair activity undertaken by the District may require the submittal of a Notice of Intent (NOI) for coverage under the California Construction General Stormwater Permit. This permit requires the preparation of a Stormwater Pollution Prevention Plan (SWPPP). If a water diversion is needed, the appropriate BMPs are incorporated into the SWPPP.

Waste Discharge Requirements (WDRs) can be required for water diversions, dewatering activities or any type of pumping and release of water. Short-term water diversions for District routine maintenance does not normally require WDRs unless there is a need for groundwater dewatering. Groundwater dewatering operations are not covered under this Guidance or the Maintenance Program EIR and will be permitted separately under the following general permit: *Order No.: R4-2018-0125 (Permit No. (CAG 994004), General National Pollutant Discharge Elimination System and Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the State Board on September 13, 2018.*

### 6.2.2 California Department of Fish and Wildlife

The modification to the bed, bank, and/or vegetation in a natural drainage (and certain man-made drainages) is regulated by the California Department of Fish and Wildlife (CDFW) under Section 1600 of the Fish and Game Code. Such modifications require a Streambed Alteration Agreement. A Section 2081 review process for state listed threatened and endangered species will take place concurrent with the Streambed Alteration Agreement permit review process.

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SESPE CREEK OVERFLOW
RAILROAD BRIDGE REPAIR

# EXHIBIT G

DECLINING AMPHIBIAN POPULATIONS TASK FORCE
FIELDWORK (DAPTF) CODE OF PRACTICE

## The Declining Amphibian Populations Task Force Fieldwork Code of Practice

A. Remove mud, snails, algae, and other debris from nets, traps, boots, vehicle tires, and all other surfaces. Rinse cleaned items with sterilized (e.g., boiled or treated) water before leaving each work site.

B. Boots, nets, traps, and other types of equipment used in the aquatic environment should then be scrubbed with 70 percent ethanol solution and rinsed clean with sterilized water between study sites. Avoid cleaning equipment in the immediate vicinity of a pond. wetland, or riparian area.

C. In remote locations, clean all equipment with 70 percent ethanol or a bleach solution, and rinse with sterile water upon return to the lab or "base camp" Elsewhere, when washing-machine facilities are available, remove nets from poles and wash in a protective mesh laundry bag with bleach on the “delicates” cycle.

D. When working at sites with known or suspected disease problems, or when sampling populations of rare or isolated species, wear disposable gloves1 and change them between handling each animal. Dedicate sets of nets, boots, traps, and other equipment to each site being visited. Clean them as directed above and store separately at the end of each field day.

E. When amphibians are collected, ensure that animals from different sites are kept separately and take great care to avoid indirect contact (e.g., via handling, reuse of containers) between them or with other captive animals. Isolation from unsterilized plants or soils which have been taken from other sites is also essential. Always use disinfected and disposable husbandry equipment.

F. Examine collected amphibians for the presence of diseases and parasites soon after capture. Prior to their release or the release of any progeny, amphibians should be quarantined for a period and thoroughly screened for the presence of any potential disease agents.

G. Used cleaning materials and fluids should be disposed of safely and, if necessary, taken back to the lab for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

For further information on this Code, or on the Declining Amphibian Populations Task Force, contact John Wilkinson, Biology Department, The Open University, Walton Hall, Milton Keynes, MK7 6AA, UK. E-mail: DAPTF@open.ac.uk Fax: +44 (0) 1908-654167

1 Latex gloves should not be used. They are toxic to amphibians. Use vinyl or nitrile disposable gloves instead.

# UTILITIES MATRIX

**Project Name:** Sespe Creek Bridge Overflow Repair

**Last Updated:** 3/24/2025

| ITEM | UTILITY DESCRIPTION | UTILITY OWNER<br>Utility Company<br>Contact Name<br>Address<br>Phone | AGREEMENT NO. | LOCATION<br>(Project Station or MilePost Limits) | DATA SOURCE<br>(e.g. As-Builts, Field Survey, Potholing) | POTENTIAL CONFLICT | DISPOSITION<br>PIP / RELOCATE / ENCASE / BY | ESTIMATED COST<br>LENGTH (FT.) | UNIT PRICE | AMOUNT | STATUS<br>Next steps; Outstanding issues |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | OH Conductor 751 volts - 22.5 kV | So. California Edison Company<br>Bryan Alcazar<br>10060 Telegraph Rd., Ventura, CA 93004<br>(909) 548-7249 | N/A | SCE facilities are located on the south end of the Old Telegraph Rd. Bridge | Area map | Electricity utilities does not interfere with the constuction | | | | $ - | No further steps needed. |
| 2 | 8" crude line running along Old Telegraph Rd Bridge. | Carbon California<br>Luke Faith<br>270 Quail Court, Suite B, Santa Paula, CA 93060<br>(805) 794-8593 | N/A | Gas pipeline is located along the Old Telegraph Rd bridge. | Area map | Gas pipeline does not interfere with the construction | | | | $ - | No further steps needed. |
| 3 | 8" trunk line running along Old Telegraph Rd Bridge. | Crimson Midstream, LLC<br>Cordelia Cisneros<br>10060 Telegraph Rd, Ventura, CA 93004<br>(562) 285-4133 | N/A | Petroleum pipeline is located along the Old Telegraph Rd. bridge. | As-builts | Petroleum pipeline does not interfere with the construction. | | | | $ - | No further steps needed. |
| 4 | N/A | AT&T Distribution<br>Eddie Bolyn<br>(805) 790-5984 | N/A | N/A | N/A | Utility Owner confirmed that there are no utility conflicts with the project location. | | | | $ - | Made contact with owner; no further steps needed. |
| 5 | N/A | Charter Spectrum | N/A | Existing facilities are located along the Old Telegraph Rd. bridge | N/A | Utility Owner confirmed that there are no utility conflicts with the project location. | | | | $ - | Made contact with owner; no further steps needed. |
| 6 | N/A | Chevron Pipe Line Company<br>6001 Bollinger Canyon Rd.<br>San Ramon, CA 94583<br>(877) 596-2800 | N/A | N/A | N/A | Utility Owner confirmed that there are no utility conflicts with the project location. | | | | $ - | Made contact with owner; no further steps needed. |
| 7 | N/A | City of Fillmore<br>Georgie Gerardo<br>250 Central Ave.<br>Fillmore, CA 93015<br>(805) 586-1367 | N/A | N/A | N/A | Utility Owner confirmed that there are no utility conflicts with the project location. | | | | $ - | Made contact with owner; no further steps needed. |
| 8 | N/A | SoCalGas<br>P.O. Box 1626, Monterey Park, CA 91754-8626 | N/A | N/A | N/A | Utility Owner confirmed that there are no utility conflicts with the project location. | | | | $ - | Made contact with owner; no further steps needed. |
| 9 | | | | | | | | | | $ - | |
| 10 | | | | | | | | | | $ - | |

SPBL-2025-01

# SESPE CREEK OVERFLOW RAILROAD BRIDGE REPAIR

## **EXHIBIT I**
## BEST MANAGEMENT PRACTICES (BMP)

**BEST MANAGEMENT PRACTICES**

**SPBL-2025-01**

**SESPE CREEK OVERFLOW RAILROAD BRIDGE REPAIR**

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## SCHEDULE FOR BEST MANAGEMENT PRACTICES (BMP) IMPLEMENTATION

### Mobilization:

1. Install Perimeter Controls around staging yards and disturbed areas – SE1 Silt Fence or SE-5 Fiber Rolls

2. Install TC-1 Stabilized Construction Entrance at entrances/exits

3. Implement Waste Management – WM-01 Material Delivery and Storage, WM-02 Material Use, WM-03 Stockpile Management, WM-04 Spill Prevention and Control. WM-05 Solid Waste Management, WM-06 Hazardous Waste Management, WM-08 Concrete Waste Management, WM-09 Sanitary Septic Waste Management, WM-10 Liquid Waste Management

4. Implement WE-1 Wind Erosion Control

### Bridge Repair:

1. Implement Non-Stormwater BMPs – NS-1 Water Conservation Practices, NS-2 Dewatering Operation, NS-4 Temporary Stream Crossing, NS-5 Water Diversion, NS-9 Vehicle and Equipment Cleaning, NS-9 Vehicle and Equipment Fueling, NS-10 Vehicle and Equipment Maintenance, NS-12 Concrete Curing, NS-13 Concrete Finishing, NS-14 Material and Equipment Use Over Water, NS-15 Demolition Removal Adjacent to Water.

### Final Stabilization:

1. Implement one or a combination of the following on disturbed and exposed soil surface outside of the stream bed – EC-3 Hydraulic Mulch, EC-4 Hydroseeding, EC-5 Soil Binders, EC-6 Straw Mulch, EC-12 Streambank Stabilization, EC-15 Soil Preparation and Roughening.

**Regulatory Permitting:**

1. All materials and supplies necessary for implementing these construction conditions (BMPs) must be on-site and ready for use at the start of the construction activity and must remain in supply and ready for implementation throughout the construction process. All non-structural best management practice (BMP) materials (e.g., training documents, compliance tracking procedures) must be ready for use at the start of construction.

2. Measures shall be employed to minimize disturbances along stream channels that will adversely impact the water quality of waters of the state. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete Project implementation.

3. The Permittee shall oversee the work of the contractor during implementation of the Project, to ensure that the work is being done in accordance with the plans.

4. Environmentally sensitive areas and environmentally restricted areas, including any avoided waters of the state, must be clearly identified in the field for exclusion prior to the start of construction. Such identification must be properly maintained until construction is completed and the soils have been stabilized. Equipment, materials, or any other substances or activities that may impact waters of the state outside of the defined Project boundaries.

5. Topsoil: For any excavation, including utility line trenches, the top 6 to 12 inches of topsoil shall be removed and stockpiled separately during construction. Following installation, the topsoil shall be replaced and seeded with native vegetation.

6. Fugitive Dust Control: Dust control activities shall be conducted in such a manner that will not produce downstream runoff.

7. Dust abatement chemicals added to water can be hazardous to wildlife and, if allowed to enter streams, detrimental to water quality. Therefore, dust abatement activities shall be conducted so that sediment or dust abatement chemicals are not discharged into waters of the state. Dust abatement products or additives that are known to be detrimental to water quality or wildlife shall not be used.

8. Use of Mechanized Equipment: Activities permitted under this Order shall be conducted in a manner that minimizes ground disturbance, soil compaction, rutting and other mechanical impacts. Equipment shall be operated and maintained in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to water bodies or wetlands. Appropriate Project specific BMPs shall be specified by the Permittee and shall be approved by Water Board staff prior to Project discharges.

9. No equipment shall be operated in areas of flowing or standing water.

10. At no time shall the Permittee use any vehicle or equipment which leaks any substance that may impact water quality.

11. The Permittee shall designate a staging area for equipment and vehicle fueling, maintenance, and storage at least one hundred (100) feet away from waters, in a location where fluids or accidental discharges cannot flow into waters. Any maintenance or refueling of vehicles or equipment occurring on-site shall be done in a designated area with secondary containment including drip pans and/or placement of absorbent material, located away from drainage courses to prevent the runoff of storm water and the runoff of spills.

12. Stationary equipment (motors, pumps, generator, etc.) and vehicles not in use shall be positioned over drip pans or other types of containment.

13. Spill and containment equipment (oil spill booms, sorbent pads, etc.) shall be maintained onsite at all locations where equipment is used or staged. If critical equipment must be refueled within one hundred (100) feet of a water of the state, spill prevention and countermeasures must be implemented to avoid spills and refueling areas shall be provided with secondary containment including drip pans and/or placement of absorbent material.

14. All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter.

15. All imported riprap, rocks, and gravel used for construction shall be pre-washed.

16. The number of access routes, number and size of staging areas, and the total area of the ground disturbance shall be limited to the minimum necessary to achieve the project goal.

17. New and reconstructed watercourse crossings shall be designed to accommodate 100-year flood flow (including transport of debris and sediment).

18. All existing roads shall be left in a condition equal to or better than their condition before Project activities commence.

19. Cured in Place Pipe is prohibited where it could cause detrimental physiological responses to human, plant, animal, or aquatic life, or cause discharges of waste to waters of the state that do not comply with water quality objectives.

20. Crossings shall be designed to ensure that the stream does not divert in case of a crossing failure.

21. Bridges, culverts, dip crossings, or other structures must be installed so that water and in-stream sediment flow is not impeded.

22. Watercourse crossings proposed for removal or watercourse crossings located on roads to be decommissioned must meet the following conditions:

    a. Permanently decommissioned stream crossings shall be excavated to exhume the original, stable, stream bed and channel side-slopes, and then banks must be stabilized with materials including, but not limited to, mulch, seeding, replanting, and rock armoring.

    b. Fills shall be excavated to form a channel as close as feasible to the natural watercourse grade, that is wider than the natural channel upstream and downstream of the crossing to be removed.

    c. Any resulting cut bank shall not exceed a grade of 50% from the outside edge of the channel to prevent slumping and prevent erosion.

23. Access routes shall be constructed to ensure proper stability of cut and fill slopes and ensure drainage and runoff generated from access routes is hydrologically disconnected from receiving waters and does not cause erosion and sediment discharge.

24. Access route surfaces and ditches planned for construction, reconstruction, or maintenance shall be hydrologically disconnected from streams and stream crossings. Access route surface runoff must be designed to sufficiently disperse flows to appropriate vegetated or otherwise protected upland areas to minimize or avoid erosion, rather than concentrating flows and/or discharging sediment to waters of the state.

25. Drainage structures shall still be spaced with enough frequency to prevent concentration of access route related runoff and erosion of access route fill material.

26. Dischargers shall prioritize locating the outflow of the access route surface drainage structures towards well-vegetated, stable areas to ensure road related discharges do not negatively impact waters of the state. Access route surface drainage structure outflow shall not directly discharge to waters of the state or areas that will likely result in erosion and direct discharge to waters of the state.

27. Dischargers shall ensure that access route drainage features are maintained to prevent erosion and sediment discharge.

28. All sediment and other material disturbed during blading and other access route construction activities shall be contained and removed or permanently stabilized with effective engineered sediment and erosion control BMPs. Cut or bladed sediment or other material shall not be side-cast or otherwise pushed off the roadway and left unstabilized such that it is subject to erosion or in a manner that threatens to discharge sediment to a water of the state.

29. Construction material, debris, rubbish, spoils, soil, silt, sawdust, rubbish, steel, welding slag, welding rods, waste material, waste containers, other organic or earthen material, or any other substances which could be detrimental to water quality or hazardous to aquatic life that is discharged as a result of Project related activities shall be prevented from entering waters of the state. Spoils from excavations shall not be stored in waters of the state.

30. Discharge of unset cement, concrete, grout, damaged concrete spoils, or water that has contacted uncured concrete or cement, or related washout to surface waters, ground waters, or land is prohibited. If concrete washout is necessary at the site, washout containment shall be used to prevent any discharge. Wastewater may only be disposed by delivery to a sanitary wastewater collection system/facility (with authorization from the facility's owner or operator) or a properly licensed disposal or reuse facility.

31. Hardened concrete or grout shall be disposed at an authorized landfill, in compliance with state and local laws, ordinances, and regulations.

32. All construction debris and trash shall be contained and regularly removed from the work area to the staging area during construction activities.

33. To prevent sediment-laden water from being released back into waters of the state during transport of spoils to disposal or reuse locations, truck beds shall be lined with an impervious material (e.g., plastic), or the tailgate shall be blocked with wattles or other appropriate filtration material.

34. All construction-related equipment, materials, and any temporary BMPs no longer needed, shall be removed and cleaned from the site upon completion of the Project.

35. Unless authorized for restoration, material excavated to prepare a site for placement of the permitted fill material must be properly disposed of in an upland area. The disposal site must be located at a sufficient distance away from flowing or standing water such that the excavated material does not erode or move in any way into any water of the state.

36. The Permittee shall implement and maintain erosion control measures and sediment controls (e.g., jute, weed-free straw, coconut fiber erosion control fabric, coir logs, re-vegetation, fiber rolls, erosion control blankets, hydromulching, compost, weed-free straw with tackifiers, temporary basins etc.) at all disturbed areas of the Project site that drain to waters of the state through the entire duration of the Project. These measures shall be constructed and maintained to prevent the discharge of earthen materials to waters of the state, including all ephemeral and intermittent drainages, seasonal swales, storm drain systems, and tributaries to waters of the state, from disturbed areas during all periods of ground clearing, site grading, and construction, as well as after completion of construction.

37. Erosion and sediment control measures shall be on site prior to the start of construction and kept on site at all times so they are immediately available for installation in anticipation of rain events.

38. Erosion and sediment control measures and other construction BMPs shall be implemented and maintained in accordance with all specifications governing their proper design, installation, operation, and maintenance.

39. Where areas of bare soil are exposed during the rainy season, silt control measures shall be used where silt and/or earthen fill threaten waters of the state. Silt control structures shall be monitored for effectiveness and shall be repaired or replaced as needed. Buildup of soil behind silt fences shall be removed promptly and any breaches or undermined areas repaired at once.

40. After sediment removal, the Permittee shall grade channels so that the transition between the work area and the existing channel, both upstream and downstream, is smooth and continuous, and does not present a “wall” of sediment or other blockage that could erode or cause erosion once flows are restored.

41. Where bank stabilization activities may result in modifications to channel cross-sections and/or profiles, the banks shall be re-contoured to match the adjacent bank slope.

42. All areas that have fourteen or more days of inactivity must be stabilized within fourteen days of the last activity. The Permittee is responsible for implementing and maintaining BMPs to prevent erosion of the rough graded areas.

43. Activities permitted under this Order shall not discharge toxic substances in concentrations that produce detrimental physiological responses to human, plant, animal, or aquatic life.

44. Discharge of unset cement, concrete, grout, damaged concrete spoils, or water that has contacted uncured concrete or cement, or related washout to surface waters, ground waters, or land is prohibited. If concrete washout is necessary at the site, washout containment shall be used to prevent any discharge. Wastewater may only be disposed by delivery to a sanitary wastewater collection system/facility (with authorization from the facility's owner or operator) or a properly licensed disposal or reuse facility.

45. Appropriate BMPs must be implemented throughout Project activities to prevent and control potential leaks/spills/drainage of potentially hazardous materials such as: non-petroleum hydraulic fluid; epoxies; paints and other protective coating materials; cement concrete or asphalt concrete; and washings and cuttings thereof.

46. Activities permitted under this Order shall not discharge waste classified as "hazardous" as defined in California Code of Regulations title 22, section 66261 and Water Code section 13173. Appropriate BMPs for hazardous substances shall be specified by the Permittee and shall be approved by Water Board staff prior to Project discharges. These BMPs shall include, at a minimum:

    a. All personnel handling fuels and other hazardous materials shall be properly trained.

    b. Adequate spill prevention and cleanup equipment and materials shall be present on site at all times during Project implementation.

    c. All mechanized equipment shall be maintained in good operating order and inspected on a regular basis.

    d. All on-site fuel trucks or fuel containers shall be stored in an area where the risk of contamination of water bodies by leaks or spills is minimized.

    e. All equipment shall be fueled, maintained, and/or parked overnight in an upland area at least 100 feet from any delineated waters of the state.

    f. Hazardous materials, including chemicals, fuels, and lubricating oils, shall not be stored within 100 feet of any delineated waters of the state, and shall be stored in appropriate containers with appropriate secondary containment.

g. Pumps or other stationary equipment operating within 100 feet of a waterbody or wetland shall utilize appropriate secondary containment systems to prevent spills.

h. Any spills or leaks of hazardous materials, chemicals, fuels, lubricants or any other potential pollutants shall be promptly and completely treated using appropriate materials and equipment.

i. Spill containment supplies shall be on site in all work areas in sufficient quantities to allow immediate remediation of fuel, oil, hydraulic fluid or similar leaks and spills.

j. A staging area for equipment and vehicle fueling and storage shall be designated at least one hundred (100) feet away from waters of the state, in a location where fluids or accidental discharges cannot flow into waters of the state.

k. Project design details (location, size, flow capacity, etc.) that document compliance with Order, section IX.G.16 through 41 shall be provided to the State Water Board for approval before this work is completed.

47. The Permittee shall restore all areas of temporary impacts to waters of the state and all Project site upland areas of temporary disturbance which could result in a discharge to waters of the state in accordance with the Restoration Plan for Temporary Impacts dated April 10, 2023, approved through the issuance of this Order and incorporated herein by reference

SPBL-2025-01

# SESPE CREEK OVERFLOW RAILROAD BRIDGE REPAIR

## **EXHIBIT H**
UTILITIES