Skyview Road Pedestrian Bridge Project

Biological Resources Report

Riverside County
California

Discussion of Biological Resources and Project Impacts

April 2023

SUMMARY

The County of Riverside (County) is proposing to construct a pedestrian bridge along Skyview Road to traverse the gap over the French Valley Creek as part of the Skyview Road Pedestrian Bridge Project (Project). The purpose of the Project is to provide pedestrian connectivity between the local elementary school, the French Valley Library, nearby residential communities, and the overall French Valley trail system.

This Biological Resources Report, prepared for the County, is a review and evaluation of the potential impacts to threatened, endangered, proposed listed, or sensitive species and protected habitat resources as a result of the proposed Project. Reconnaissance level and focused surveys were conducted for sensitive species as well as a site assessment for suitable habitats. The proposed Project area is approximately 5.298 acres.

Literature research and habitat assessments were conducted to assess the biological resources present within the Project area that potentially could be impacted by the Project's activities. French Valley Creek is a Waters of the United States (WOUS) and regulated by the United States (U.S.) Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) under the Clean Water Act (CWA). In addition, adjacent riparian habitats including emergent wetland, alkali salt marsh, and willow riparian scrub habitat are jurisdictional habitat types regulated by the California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB) under State law. The Project is also anticipated to have 0.286 acres of temporary impacts to willow scrub riparian habitat, as well as 0.029 acres of permanent impacts due to abutments and stormwater drain improvements, and 0.077 acres of shade impacts to willow scrub riparian habitat. Finally, the Project would have impacts to alkali salt marsh habitat totaling in approximately 0.067 acres of temporary impacts, 0.009 acres of permanent impacts, and 0.091 acres of shade impacts.

Additionally, a total of 11 special status species have the potential to occur within the Project area. During biological surveys, three special status species were observed in the vicinity of the Project area: least Bell's vireo ((LBV); (*Vireo bellii pusillus*)), yellow warbler (*Setophaga petechia*), and southwestern willow flycatcher ((SWFL); *(Empidonax traillii extimus*)). Three species, tricolored blackbird (*Agelaius tricolor*), Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*), and smooth tarplant (*Centromadia pungens ssp. laevis*), are considered to have a high potential of occurring within the Project area based on presence of suitable habitat and/or documented occurrences near the Project area. The remaining five species – coast horned lizard (*Phyronosoma blainvillii*), ferruginous hawk (*Buteo regalis*), spreading navarettia (*Navarettia fossalis*), white rabbit-tobacco (*Pseudognaphalium leucocephalum*), and woven-spored lichen (*Texosporium sancti-jacobi*) – are considered to have a low to moderate potential of occurring within the Project area. This determination is based on the marginal value of habitat for these species within the Project area or a lack of recent documented occurrences of these species near the Project area.

The Project area is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Area within Criteria Cell 5477. The proposed Project is a covered project under the trail provisions in Section 7.4.2 of the Western Riverside County MSHCP, as coordinated with the Western

Riverside County Regional Conservation Authority (RCA) and wildlife agencies and documented in the MSHCP Consistency Analysis. The Project is utilizing coverage from a 12,198-foot segment of previously approved trail located approximately one-mile northeast of the Project area. Project impacts to the seven Covered Species with potential to occur within the Project area were fully mitigated in advance of the Project through the development of a reserve system as described in Sections 3 and 4 of the MSHCP. The avoidance and minimization measures recommended in this document serve to reduce Project impacts to all identified special status species and their habitats.

The following permits will be obtained for the proposed Project prior to construction: Section 404 Nationwide Permit #14 from the USACE, Section 401 Water Quality Certification from the RWQCB, National Pollutant Discharge Elimination System Permit from RWQCB, and Section 1602 Streambed Alteration Agreement from the CDFW. The proposed Project is subject to compliance with the California Environmental Quality Act (CEQA); the County is the CEQA lead agency.

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List of Abbreviated Terms

°F	Degrees Fahrenheit
BMPs	Best Management Practices
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFG	California Fish and Game
CFR	Code of Federal Regulations
CGP	Construction General Permit
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Riverside
CWA	Clean Water Act
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Area
FESA	Federal Endangered Species Act
HU	Hydrologic Unit
ILF	In-Lieu Fee
IPaC	Information for Planning and Consultation
JPR	Joint Project Review
LBV	Least Bell's Vireo
MBTA	Migratory Bird Treaty Act
MOU	Memoranda of Understanding
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service
OHWM	Ordinary High Watermark
Project	Skyview Road Pedestrian Bridge Project
RWQCB	Regional Water Quality Control Board
Sq. ft.	Square Feet
SSC	Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDLs	Total Maximum Daily Loads
U.S.	United States
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

USGS	United States Geological Survey
WOS	Waters of the State
WOUS	Waters of the United States

CHAPTER 1. INTRODUCTION

The County is proposing to construct a pedestrian bridge along Skyview Road to traverse the gap over French Valley Creek as part of the Skyview Road Pedestrian Bridge Project. The purpose of the Project is to provide pedestrian connectivity between the local elementary school, the French Valley Library, nearby residential communities, and the overall French Valley trail system. The Project is located directly east of Highway 79 (Winchester Road) and approximately 0.5 miles north of Thompson Road in the unincorporated area of Riverside County, California (Figure 1. Project Vicinity; Figure 2. Project Location, Figure 3. Project Features). The Project is located in Township 6 South, Range 2 West of the San Bernardino Base Meridian in the U.S. Geological Survey (USGS) 7.5-minute topographic maps.

1.1 Project Description

The County of Riverside (County) proposes to construct a pedestrian bridge to traverse the gap along Skyview Road at French Valley Creek in the Community of French Valley in the County's unincorporated Southwest Area.

Skyview Road is designated as a collector street that connects Highway 79 (Winchester Road) and Pourroy Road in the French Valley community in unincorporated Riverside County, California. Approximately 800 feet east of Highway 79 is French Valley Creek. There is a gap in Skyview Road where there is no road crossing at French Valley Creek. The County has determined a need to provide continuity on Skyview Road over French Valley Creek. The bridge will serve as a multipurpose pedestrian and bicyclist bridge with no vehicular travel. A new library, the French Valley Library, has been recently constructed at the northwest quadrant of the proposed pedestrian bridge in a separate project by the County. The proposed bridge will provide a trail path between the French Valley Library and the Susan LaVorgna Elementary School located at the southeast corner of the intersection of Skyview Road and Via Santiago/Algarve Avenue.

The proposed bridge will consist of an 18-foot-wide walkway width and will be approximately 370 feet long and 22 feet tall from the bottom of the river channel to the top of the handrailing at its highest point. The bridge will consist of four spans and three single-column piers. Two 100-foot-long interior spans and 85-foot-long end spans in a structure depth of 4 feet are proposed. It is anticipated the single column piers will be approximately 4-feet in diameter supported on 4'-6" diameter Type I Cast-In-Drilled-Hole (CIDH) concrete piles. Single column piers on CIDH pile shafts instead of conventional pile footings were considered to minimize channel excavation and reduce the permanent impacts within the channel.

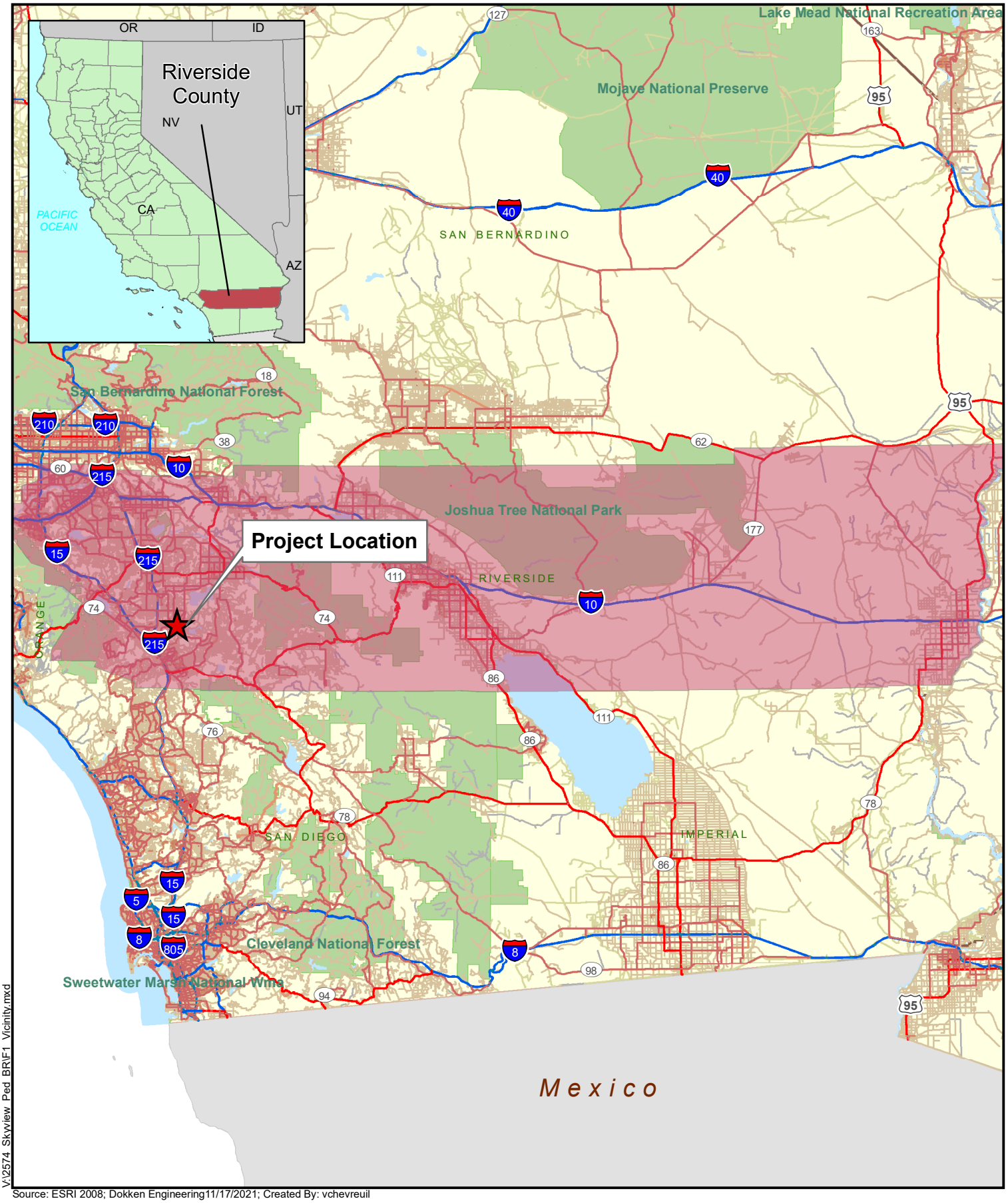
In anticipation of construction, the Project requires geotechnical investigations to be conducted within French Valley Creek. Three geotechnical borings will be taken within the channel at the location of each pier. Each boring will be approximately 8 inches wide and go to a depth of approximately 70 feet. The boreholes will be excavated using a truck-mounted rotary-wash drill rig and will be backfilled according to industry standard practice to protect groundwater resources. Soil cuttings from borings will be temporarily stored onsite in 55-gallon drums, tested for contaminants, and then disposed of off-site. Onsite geotechnical investigations are anticipated to have temporary impacts to vegetation communities within the Project site for access to the boring locations; however, these impacts are

located entirely within the temporary impact and shade impact areas anticipated during construction of the proposed Project. Mitigation for temporary impacts associated with the geotechnical investigations will be compensated for with the proposed Project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

Architectural treatments will be implemented on the railings along the edges of the bridge deck, deck surface, exterior faces of the bridge girder, piers, and abutments to enhance the bridge aesthetics. The bridge railings will be installed with low-profile LED light with a color temperature of 2200K or lower to enhance safety without light intrusion onto the biologically sensitive channel bed.

The proposed bridge deck is anticipated to be slightly raised from the existing riverbanks, which will require a geometric transition at the road approaches. The approach transition may require retaining walls and bridge wingwalls to accommodate the road transition. The proposed bridge will be designed for emergency vehicle access.

There will be improvements to the channel slopes to accommodate the bridge abutments and reconstruction of storm drains. This work will occur within existing hardscape areas, such as the unvegetated riprap and concrete areas on either side of the channel at the bridge location. Minimal grading is anticipated associated with the reconstruction of the storm drains within the footprints of existing facilities, all other grading will be within the abutment and pier footprints. There will be no new Project components within the channel other than the installation of the bridge piers/columns.



Source: ESRI 2008; Dokken Engineering11/17/2021; Created By: vchevreuil

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0 10 20 30 Miles

FIGURE 1
Project Vicinity
Skyview Road Pedestrian Bridge Project
Winchester, Riverside County, California

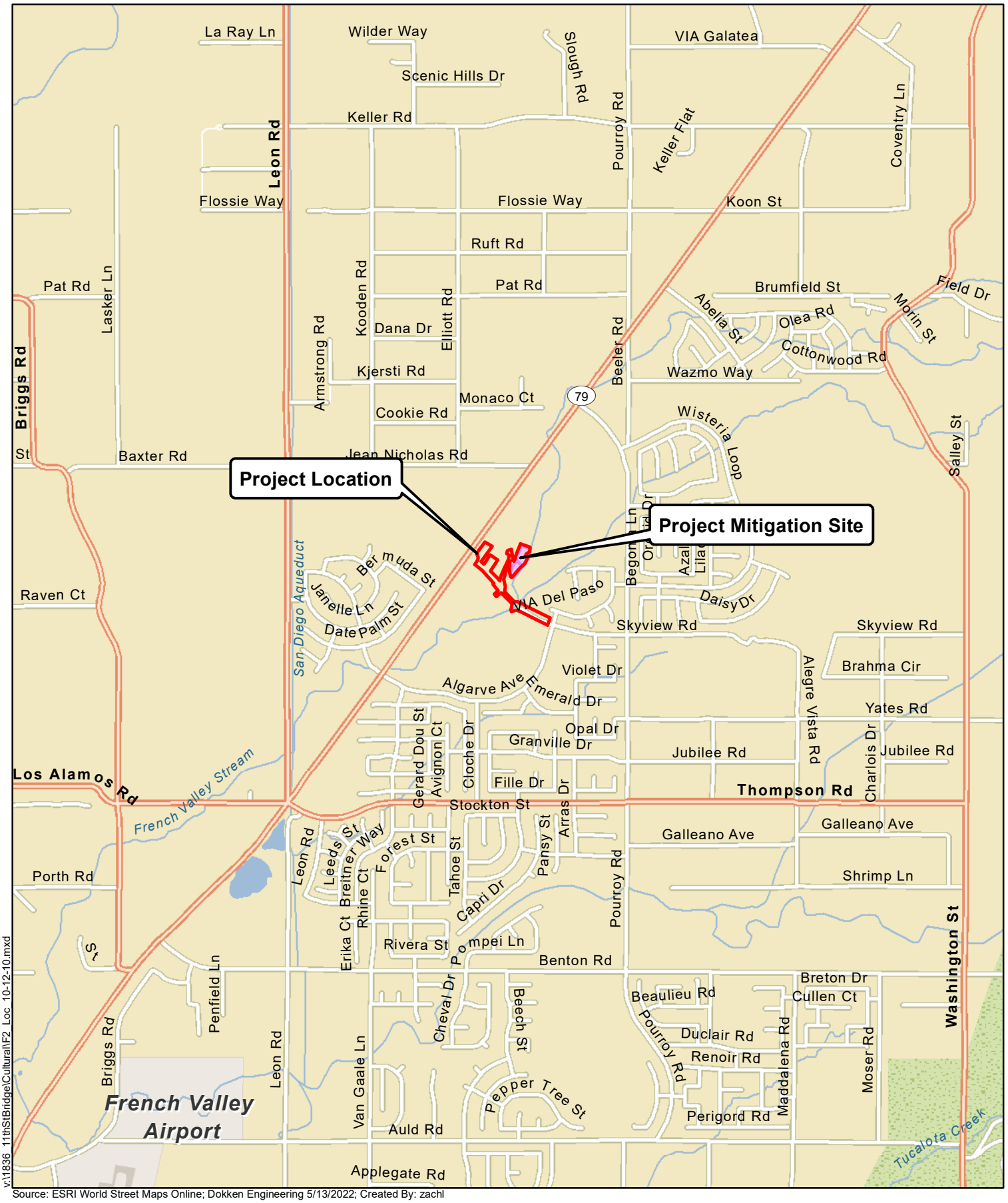

FIGURE 2
Project Location
Skyview Road Pedestrian Bridge Project
Winchester, Riverside County, California

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Source: ESRI Maps Online; Dokken Engineering 10/7/2022; Created By: cfavro

1 inch = 150 feet

0 150 300 450 600 750 Feet

Figure 3
Project Features
Skyview Road Pedestrian Bridge Project
Winchester, Riverside County, California

CHAPTER 2. REGULATORY REQUIREMENTS

2.1 Federal Regulations

This section describes the Federal regulations that are applicable to the proposed project including: the Federal Endangered Species Act (FESA) of 1973 (16 U.S.C. Section 1531 et seq.), Executive Order (EO) 13112 (Prevention and Control of Invasive Species) and EO 13186 (Migratory Bird Treaty Act).

2.1.1 Federal Endangered Species Act

FESA provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the Act (16 U.S.C. Section 1533) and the ecosystems upon which they depend. These species and resources have been identified by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Potential impacts to FESA listed species have already been quantified and mitigated during the development of the MSHCP reserve system. However, coordination with USFWS will occur as a part of the Project's Joint Project Review (JPR) process.

2.1.2 Clean Water Act

The CWA was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to WOUS. The CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. Environmental Protection Agency (EPA) to set national water quality standards and effluent limitations, and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in stormwater runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is the CWA's primary regulatory tool.

Section 303(d)

Under the mandate of Section 303(d) of the CWA, the RWQCB is required to formulate a list of surface water bodies that exceed applicable water quality standards. Subsequently, the RWQCB is required to describe the impairment sources and prioritize these water bodies to develop Total Maximum Daily Loads (TMDLs). The current list was updated in 2016. French Valley Creek is not included as a 303(d)-listed water with TMDLs required (State Water Resources Control Board [SWRCB] 2016).

Section 401

The RWQCB has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., WOUS including wetlands). The RWQCB also asserts authority over Waters of the State (WOS) under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act. The proposed Project is located within the jurisdiction of the San Diego RWQCB.

Section 402

The County is a designated municipal permittee under the EPA's National Pollutant Discharge Elimination System (NPDES), which regulates stormwater flows into natural water bodies. The NPDES regulations require permitted areas to implement specific activities and actions to eliminate or control stormwater pollution.

Construction General Permit (CGP; Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ), became effective on February 14, 2011 and July 17, 2012, respectively. The permit regulates stormwater discharges from construction sites which result in a land disturbance of equal to or greater than 1 acre, and/or are smaller sites that are part of a larger common plan of development. For all projects subject to the CGP, applicants are required to develop and implement an effective Stormwater Pollution Prevention Plan (SWPPP). The Project will use Caltrans 2018 Standards and updates and shall be supplemented with Riverside County standards through the Special Provisions.

By law, all stormwater discharges associated with construction activity, including, but not limited to, clearing, grading, grubbing or excavation, or any other activity that results in a land disturbance of equal to or greater than one acre must comply with the provisions of the CGP. Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop a SWPPP, to implement sediment, erosion, and pollution prevention control measures, and to obtain coverage under the CGP.

The CGP separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory stormwater runoff pH and turbidity monitoring, and pre- and post-construction aquatic biological assessments during specified seasonal windows.

Section 404

The USACE regulates discharges of dredged or fill material into WOUS. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

2.1.3 Executive Order 13112: Prevention and Control of Invasive species

EO 13112 (signed February 3, 1999) directs all federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO requires consideration of invasive species in National Environmental Policy Act (NEPA) analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

2.1.4 Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding (MOU) that will promote the conservation of migratory bird populations. Protocols developed under the MOU will include the following agency responsibilities:

- avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;
- restore and enhance habitat of migratory birds, as practicable; and
- prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist federal agencies in their efforts to comply with the MBTA (50 Code of Federal Regulations (CFR) 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

2.2 State Regulations

This section describes the State of California regulations that are applicable to the proposed Project including: CEQA (California Public Resources Code, Sections 21000 – 21178, and Title 14 CCR, Section 753, and Chapter 3, Sections 15000 – 15387), the California Endangered Species Act (CESA; Fish and Game Code (CFG Code) Sections 2050-2116), California Fish and Game Code (CFG Code) Section 3503 and 3503.5, and CFG Code Section 3513.

2.2.1 California Environmental Quality Act

CEQA is a California state law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. The County is the CEQA lead agency for this Project.

2.2.2 California Endangered Species Act

The CESA (CFG Code Section 2050 et seq.) requires CDFW to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by CESA (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires the CDFW to comply with the CEQA (Pub. Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. The CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity (California

Code Regulations, Title 14, Section 783.5(d)(3)). CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species (CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b)).

2.2.3 Sections 3503 and 3503.5: Native Bird Protection

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the study area and could provide potential nesting habitat for birds and raptors.

2.2.4 Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

2.3 Local Regulations

2.3.1 Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County MSHCP was created to enhance and maintain biological diversity by conserving species and their habitats in Western Riverside County. The MSHCP provides comprehensive compliance with Federal and State endangered species laws for covered projects and standardizes mitigation/compensation measures for hundreds of covered species to streamline the regulatory process, which is administered by the County.

Any Project impacts to covered species and habitats have been pre-mitigated by the establishment of a reserve system as described in Section 4 of the MSHCP. Covered Projects have take authorization under the Section 10(a) permit issued by the USFWS to Permittees pursuant to 16 U.S.C.

2.3.2 Riverside County General Plan

The Project has been designed to be consistent with the provisions of the Riverside County 2015 General Plan. According to the General Plan's Healthy Communities Element, Riverside County is committed to providing a sustainable multi-use open space trail network that is accessible, safe, and enjoyable for residents. The proposed Project serves to provide safe pedestrian connectivity between the French Valley Library, the Susan LaVorgna Elementary School, nearby residential communities, and the overall French Valley trail system.

2.4 Avoidance, Minimization, and Mitigation Measures

Avoidance and minimization measures BIO-1 through BIO-27 would be implemented throughout the Project to avoid and minimize impacts to sensitive biological resources. Measures BIO-9 through BIO-27 have been adapted from the standard BMPs described in Volume 1, Appendix C of the MSHCP and are included in order to maintain Project consistency with the MSHCP. Measure BIO-28 would be implemented to mitigate for impacts to riparian and riverine resources.

<u>Avoidance/Minimization Measures:</u>

BIO-1: BMPs will be incorporated into Project construction to minimize impacts on the

environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction;
- Upon completion of construction activities, any temporary barriers to surface water flow must be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

BIO-2: If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed. If a special status species is encountered on the Project site, work will halt until said species is outside of the Project area. Any special status species occurrences during construction will be reported to the appropriate resource agency.

BIO-3: Removal of riparian vegetation will occur prior to construction and between October 1 and February 28 to avoid least Bell's vireo breeding season, as well as the general breeding season for other nesting birds. If vegetation removal is desired to occur during the breeding season, a qualified biologist(s) will conduct a pre-construction survey for least Bell's vireo and other migratory bird species within three days of the start of construction during the least Bell's vireo breeding season (March 1 through September 30). If active least Bell's vireo nests are identified within the Project Area or within 300 feet of the Proposed Project Area, no willow scrub or other riparian trees or shrubs will be removed until after the end of the least Bell's vireo breeding season (September 30). If active nests of other migratory birds are identified within the Project Area or within 300 feet of the Proposed Project Area, no willow scrub or other riparian trees or shrubs will be removed until after the end of the general nesting season (June 30).

BIO-4: Plastic mono-filament netting (erosion control matting) or similar material that could trap coast horned lizards or other wildlife must not be used. Acceptable substitutes include jute, coconut coir matting or tackified hydroseeding compounds.

BIO-5: To avoid inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches greater than 6 inches deep must be covered at the end of the day or contain at least one escape ramp made of earth fill or wooden planks. All holes must be inspected by the Project biologist or on-site inspector at the beginning of each workday and before the holes and trenches are filled.

BIO-6: Prior to construction-related activities, a protocol level botanical survey will be conducted by the Project biologist to detect if NEPSSA 4 plant species (San Diego ambrosia, spreading navarretia, and Wright's trichocoronis), local Criteria Area plants (smooth tarplant, Coulter's goldfields) and other special status plants (white rabbit-tobacco, woven-spored lichen) are present within the Project area. The survey will be conducted during the appropriate blooming season when special status plants are more likely to be encountered. If any special status plant species are discovered within the Project footprint prior to construction, the RCA shall be notified and the County will determine if the population can be avoided.

BIO-7: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-8: All hydroseed and plant mixes must not contain any species identified as being invasive by Cal-IPC.

BIO-9: A qualified biologist will be required to conduct a training session for project personnel prior to construction. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the Project, and the access routes to and Project site boundaries within which the Project activities must be accomplished.

BIO-10: Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.

BIO-11: The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.

BIO-12: The upstream and downstream limits of the Project's disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.

BIO-13: Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.

BIO-14: Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.

BIO-15: When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing or other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.

BIO-16: Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

BIO-17: Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.

BIO-18: The qualified Project biologist shall monitor construction activities for the duration of the Project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the Project footprint.

BIO-19: The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.

BIO-20: Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

BIO-21: To avoid attracting predators of the species of concern, the Project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).

BIO-22: Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed Project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the Project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all

construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

BIO-23: The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

BIO-24: If construction for the Skyview Road Bridge Project does not commence within two years of geotechnical borings, on-site restoration of temporary impacts associated with geotechnical borings will be performed. This will include weeding, soil decompaction, and potentially re-seeding, if determined necessary in coordination with the wildlife agencies.

BIO_25: Compacted soils within the Project area will be decompacted following the completion of construction. This will include any compacted soils within the permanent shade impact areas.

BIO-26: Any lighting features installed as a part of the Project will have a color temperature of 2200K or lower, in order to be wildlife friendly.

BIO-27: A Western Pond Turtle Avoidance and Minimization Plan will be developed and implemented as part of the project to ensure further conservation of the species. This plan will include but is not limited to the installation of exclusionary fencing, contractor education, biological monitoring, relocation measures (relocation areas shall be preapproved by the California Department of Fish and Wildlife prior to construction), and pond turtle trapping if needed.

BIO-28: The County will be implementing a permittee responsible mitigation project to re-establish temporary impacts to willow scrub riparian, emergent wetland, and alkali salt marsh on-site, establish stream channel and willow scrub riparian habitat off-site, and enhance alkali salt marsh habitat at the nearby off-site location. The on- and off-site mitigation efforts would provide compensation for 1.804 acres of riparian/riverine resources to satisfy MSHCP and CDFW mitigation requirements. In addition, to mitigate for permanent impacts to WOS and Waters of the United States (WOUS), the County proposes payment of an ILF or purchase of mitigation credits for 0.048 acres of WOS and WOUS to compensate for impacts.

CHAPTER 3. STUDY METHODS

3.1 Biological Resources Assessment

Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator (Appendix A. USFWS Species List), the CDFW California Natural Diversity Database (CNDDB; Appendix B. CNDDB Species List), the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants (Appendix C. CNPS Species List), and the National Marine Fisheries Service (NMFS) West Coast Region Species List (Appendix D. NMFS Species List) to identify habitats and special-status species having the potential to occur within the Project area. Chapter 4.7 of this report provides a comprehensive list of the species generated from the online database searches and presents specific characteristics, habitat requirements, and potential for occurrence for each species.

3.1.1 Dokken Engineering Biological Surveys

Dokken Engineering (Dokken) biologist Scott Salembier conducted a general biological survey and habitat assessment within the Project area and an additional buffer area of French Valley Creek within approximately 50 feet of the Project area on July 24, 2019 (Figure 3). Weather was cloudy with air temperature approximately 95 degrees Fahrenheit (°F) with little to no wind. Notes were taken on observed flora and fauna, general site conditions, vegetation communities, and suitability of habitat for various special status species. All plant and animal species observed or otherwise detected during this field survey were recorded. A second biological survey to determine if any site conditions have changed and to survey the potential mitigation site was conducted by Dokken biologists Scott Salembier and Clare Favro on February 2, 2022. No significant changes to the site conditions were noted.

3.1.2 POWER Engineers Biological Surveys

POWER Engineers biologists conducted botanical surveys and habitat assessments within the Project area footprint within French Valley Creek, plus an additional approximate 50-foot buffer on April 22 and June 9, 2020. Notes were taken on observed flora and fauna, general site conditions, vegetation communities, and suitability of habitat for various special status species. All plant and animal species observed or otherwise detected during this field survey were recorded.

3.1.3 Busby Biological Services Surveys

Busby Biological Services qualified biologist Darin Busby and permitted biologists Erik LaCoste and Charles Vettes conducted habitat assessments and protocol-level presence/absence surveys for LBV and SWFL in the spring of 2020 (Appendix G. LBV and SWFL Survey Memorandums).

Surveys for LBV were conducted in accordance with the current USFWS survey protocol, *Least Bell's Vireo Survey Guidelines* (USFWS 2001). Eight surveys were conducted at least 10 days apart during the protocol survey window of April 10 to July 31. All surveys were conducted between approximately dawn and 11:00 AM and avoided periods of adverse weather conditions (e.g., excessively hot or cold temperatures, high winds, steady rain, dense fog, other inclement weather conditions) that would impede detection of LBV. Surveyors slowly walked throughout the suitable habitat within the survey area, which includes a 500-foot buffer from all proposed Project features and used visual and auditory

cues to detect LBV. Various routes were utilized to conduct an unbiased survey of the potentially suitable habitat within the survey area, while taking care not to disturb sensitive habitat or potential nest areas.

Surveys for the SWFL were conducted by a permitted biologist in accordance with the current USFWS-accepted survey protocol, *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (Sogge et al. 2010). Five surveys were conducted during the three survey periods outlined in the protocol, including one survey during the first period (May 15 to May 31), two surveys during the second period (June 1 to June 24), and two surveys during the third period (June 25 to July 17). The surveys were conducted in suitable habitat within the survey area, which includes a 500-foot buffer from all proposed Project features. All surveys were conducted between approximately 5:30 AM and 10:00 AM and avoided periods of adverse weather conditions (e.g., excessively hot or cold temperatures, high winds, steady rain, dense fog, other inclement weather conditions) that would impede detection of the SWFL. The permitted biologist slowly walked throughout the suitable habitat within the survey area and used visual and auditory cues to detect SWFL. Various routes were utilized to conduct an unbiased survey of the potentially suitable habitat within the survey area, while taking care not to disturb sensitive habitat or potential nest areas. Pre-recorded SWFL vocalization playbacks were used only to elicit initial calls from the SWFL but were not used frequently or to elicit further behaviors. Pre-recorded vocalizations were played for a period of 10 to 15 seconds and were generally repeated approximately every 70 to 100 feet within the surveyed habitat.

3.2 Shade Impacts

The Project proposes the installation of a permanent structure spanning French Valley Creek. Shade coverage resulting from the proposed pedestrian bridge during the summer season was analyzed. Due to the presence of the proposed bridge throughout the year, shade impacts associated with the Project are considered permanent.

Shade impacts were evaluated using the sun path and shadow data available on sunearthtools.com. Using the proposed pedestrian bridge height and the sun path data for May 21, 2022 (which is within the peak growing season), shade impacts resulting from the construction of the bridge were estimated throughout the day.

3.3 Survey Limitations

Sensitive wildlife species with the potential to occur in the Project area may be cryptic (difficult to detect) or transient, migratory species. The population size and locations of sensitive species may fluctuate through time. Because of this, the data collected for this report represents a "snapshot" in time and may not reflect actual future conditions.

The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and consider the uncertainties and limitations imposed by the environment. However, due to the experience and qualifications of the consulting biologists involved in the surveys, this limitation is not expected to severely influence the results or substantially alter the findings.

Biological surveys were conducted by Dokken biologists in July 2019, by POWER Engineers biologists on April 22 and June 9, 2020, and Busby Biological Services throughout the spring of 2020, which are within the nesting bird season and the typical blooming season for most local plant species. No temporal limitations are anticipated to substantially influence survey results.

CHAPTER 4. RESULTS: ENVIRONMENTAL SETTING

4.1 Biological Study Area

Prior to field surveys, the Project area was defined as the area required for Project activities including staging, access, and construction. From northwest to southeast, the Project area measures approximately 1,390 feet and is approximately 330 feet at its widest point. The total area of the Project area is approximately 5.298 acres (Figure 3). The Project area is located along Skyview Road, directly east of Highway 79 and approximately 0.5 miles north of Thompson Road in unincorporated Riverside County, California. The Project is within the Southwest Area Region of the MSHCP. Land use within the Project area is a mix of development, emergent wetland, willow scrub riparian, and alkali marsh habitat. The Project area also partially overlaps with two existing non-RCA conservation easements owned by Bellacap and Ryland Homes of California.

4.2 Topography and Soils

The proposed Project site is situated in a valley and is approximately 1,365 feet above mean sea level. Topographical features in the Project vicinity include the Santa Ana Mountains approximately 17 miles to the west, the Diamond Valley Lake 4.4 miles northeast and the Skinner Reservoir 2.25 miles southeast.

The soils present on the proposed Project site, as mapped by the United States Department of Agriculture, Natural Resource Conservation Service (NRCS) include the following (Appendix E. NRCS Soil Report) (NRCS 2019):

- Chino silt loam, drained, saline-alkali
- Monserate sandy loam, 0 to 5 percent slopes
- Porterville clay, moderately deep, slightly saline-alkali, 0 to 5 percent slopes
- Wyman loam, 2 to 8 percent slopes, eroded
- Yokohl loam, 2 to 8 percent slopes
- Yokohl loam, 8 to 25 percent slopes, severely eroded.

4.3 Vegetation

Plant species within the Project area were recorded during the biological surveys conducted by Dokken biologists on July 24, 2019 and February 2, 2022 and by POWER Engineers biologists on April 22 and June 9, 2020. Table 1 lists the plant species observed during these surveys.

4.3.1 Alkali Salt Marsh

Alkali salt marsh is a seasonally flooded vegetation community that occurs in open stands in arid, low-elevation environments and is characterized by plant assemblages that are xerophytic and halophytic (CDFG 2021). This habitat type is present within the section of French Valley Creek that passes through

the Project area and is composed of species such as big saltbush (*Atriplex lentiformis*), broad-leaved pepperweed (*Lepidium latifolium*), mulefat (*Baccharis salicifolia*), telegraph weed (*Heterotheca grandiflora*), and alkali heliotrope (*Heliotropium curassavicum var. oculatum*) (Figure 4. Vegetation Communities). Alkali salt marsh comprises approximately 0.167 acres (3%) of the Project area.

Table 1. Plant Species Observed Within the Project Area

Common Name	Scientific Name	Native (N) / Non-Native (X) – [Cal-IPC Invasive Rating]
Alkali heath	*Frankenia salina*	N
Alkali heliotrope	*Heliotropium curassavicum*	N
Alkali mallow	*Malvella leprosa*	N
Alkali weed	*Cressa truxillensis*	N
Annual fireweed	*Epilobium brachycarpum*	N
Annual meadow grass	*Poa annua*	X
Annual yellow sweetclover	*Melilotus indicus*	X
Arroyo willow	*Salix lasiolepis*	N
Australian saltbush	*Atriplex semibaccata*	X – [moderate]
Bank catclaw	*Acacia redolens*	X
Big saltbush	*Atriplex lentiformis*	N
Black mustard	*Brassica nigra*	X –[moderate]
Boccone's sandspurry	*Spergularia bocconii*	X
Brass buttons	*Cotula coronopifolia*	X – [limited]
Broadleaf cattail	*Typha catifolia*	N
Broadleaved pepperweed	*Lepidium latifolium*	X – [high]
Bur clover	*Medicago polymorpha*	X – [limited]
California buckwheat	*Eriogonum fasciculatum*	N
California mugwort	*Artemisia douglasiana*	N
California sagebrush	*Artemisia californica*	N
Cattail	*Typha sp.*	N
Coast live oak	*Quercus agrifolia*	N
Common buckeye	*Junonia coenia*	N
Common knotweed	*Polygonum arenastrum*	X
Common Mediterranean grass	*Schismus barbatus*	X – [limited]
Common purslane	*Portulaca oleracea*	X
Common sow thistle	*Sonchus oleraceus*	X
Common sunflower	*Helianthus annuus*	N
Compact brome	*Bromus madritensis*	X
Coyote brush	*Baccharis pilularis*	N
Curly dock	*Rumex crispus*	X – [limited]
Datura	*Datura sp.*	N
Deergrass	*Muhlenbergia rigens*	N
Eastern annual saltmarsh aster	*Aster subulatus*	N
Field mustard	*Brassica rapa*	X – [limited]
Five horn bassia	*Bassia hyssopifolia*	X – [limited]
Foxtail barley	*Hordeum murinum*	X – [moderate]
Foxtail fescue	*Vulpia myuros*	X – [moderate]

Common Name	Scientific Name	Native (N) / Non-Native (X) – [Cal-IPC Invasive Rating]
Fringed willowherb	*Epilobium ciliatum*	N
Goodding's willow	*Salix goodingii*	N
Horseweed	*Conyza sp.*	N
Jimsonweed	*Datura sp.*	X
Lamb's quarters	*Chenopodium album*	X
Maltese star thistle	*Centaurea melitensis*	X – [moderate]
Mediterranean hoary mustard	*Hirschfeldia incana*	X – [moderate]
Mugwort	*Artemisia douglasiana*	N
Mulefat	*Baccharis salicifolia*	N
Narrowleaf cottonrose	*Filago gallica*	X
Oat sp.	*Avena sp.*	X
Paniculate tarplant	*Deinandra paniculata*	N
Pigweed aramanth	*Amaranthus albus*	X
Pineappleweed	*Chamomilla suaveolens*	N
Plume thistle	*Cirsium sp.*	X
Prickly sow thistle	*Sonchus asper*	X
Rabbitsfoot grass	*Polypogon monspeliensis*	X – [limited]
Ragweed	*Ambrosia psilostachya*	N
Red willow	*Salix laevigata*	N
Redstem filaree	*Erodium circutarium*	X – [limited]
Rough cocklebur	*Xanthium strumarium*	N
Rush sp.	*Juncus sp.*	N
Russian thistle	*Salsola tragus*	X – [limited]
Saltgrass	*Distichlis spicata*	N
Saltmarsh bulrush	*Scirpus robustus*	N
Scarlet pimpernel	*Anagallis arvensis*	X
Sea clubrush	*Bolboschoenus maritimus*	N
Seaside heliotrope	*Heliotropium curassavicum*	N
Silver wattle	*Acacia dealbata*	X – [moderate]
Smooth tarplant	*Centromadia pungens sp. caevis*	N
Soft brome	*Bromus hordeaceus*	X – [limited]
Southern cattail	*Typha domingensis*	N
Spanish false fleabane	*Pulicaria paludosa*	X
Stinging nettle	*Urtica dioica*	N
Stinknet	*Oncosiphon piluliferum*	X – [high]
Sweet clover	*Melilotus albus*	X
Sweet yellow clover	*Melilotus officinalis*	X
Tamarisk	*Tamarix ramosissima*	X – [high]
Telegraph weed	*Heterotheca grandiflora*	N
Toad rush	*Juncus bufonius*	N
Tocalote	*Centaurea melitensis*	X – [moderate]
Tree tobacco	*Nicotiana glauca*	X – [moderate]
Water speedwell	*Veronica anagallis-aquatica*	X
Watercress	*Rorippa nasturtium-aquaticum*	N

Common Name	Scientific Name	Native (N) / Non-Native (X) – [Cal-IPC Invasive Rating]
Western ragweed	*Ambrosia psilostachya*	N
Whispering bells	*Emmenanthe penduliflora*	N
Wild tarragon	*Artemisia dracunculus*	N
Willowherb	*Epilobium brachycarpum*	N
Yerba mansa	*Anemopsis californica*	N

4.3.2 Developed

Land within the Project area east and west of French Valley Creek is comprised exclusively of developed land, including residential developments and associated facilities such as residential houses, yards, driveways, sidewalks, and roads. The developed land cover type makes up the majority of the Project area at approximately 4.470 acres (84%) of the Project area.

4.3.3 Emergent Wetland

Emergent wetlands are characterized by herbaceous hydrophytes that are usually perennial and present for most of the growing season (USFWS 2021). This habitat type is present within the section of French Valley Creek that passes through the Project area and is composed of species such as cattail (*Typha sp.*), mugwort (*Artemisia douglasiana*), and willowherb (*Epilobium brachycarpum*). Emergent wetland comprises approximately 0.336 acres (6%) of the Project area.

4.3.4 Willow Scrub Riparian

Willow scrub riparian is a vegetation community that is dominated by young willow trees and shrubs and serves as an early successional stage of riparian woodland (Holly 2011). This habitat type is present within the section of French Valley Creek that passes through the Project area and is dominated by arroyo willow (*Salix lasiolepis*), silver wattle (*Acacia dealbata*), tamarisk (*Tamarix ramosissima*) and mulefat. Willow scrub riparian comprises approximately 0.328 acres (6%) of the Project area.

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Source: ESRI Maps Online; Dokken Engineering 10/7/2022; Created By: cfavro

1 inch = 100 feet

0 100 200 300 400 500 Feet

Figure 4
Vegetation Communities
Skyview Road Pedestrian Bridge Project
Winchester, Riverside County, California

4.4 Wildlife

Animal species within the Project area were recorded during the biological surveys conducted by Dokken biologists on July 24, 2019 and February 2, 2022 and by POWER Engineers biologists on April 22 and June 9, 2020. In addition, Busby Biological Services observed several wildlife species over their eight surveys conducted in the spring of 2020. Table 2 lists the animal species observed during the surveys.

Table 2. Wildlife Species Observed Within the Project Area

Common Name	Scientific Name	Native (N) / Non-Native (X)
Allen's hummingbird	*Selasphorus sasin*	N
American coot	*Fulica americana*	N
American crow	*Corvus brachyrhynchos*	N
American goldfinch	*Spinus tristis*	N
American kestrel	*Falco sparverius*	N
Anna's hummingbird	*Calypte anna*	N
Barn swallow	*Hirundo rustica*	N
Bewick's wren	*Thryomanes bewickii*	N
Black phoebe	*Sayornis nigricans*	N
Black rail	*Laterallus jamaicensis*	N
Black-chinned hummingbird	*Archilochus alexandri*	N
Black-headed grosbeak	*Pheucticus melanocephalus*	N
Brown-headed cowbird	*Molothrus ater*	N
Bullfrog	*Rana catesbeiana*	X
Bushtit	*Psaltriparus minimus*	N
California scrub-jay	*Aphelocoma californica*	N
California tree frog	*Pseudacris cadaverina*	N
Cassin's kingbird	*Tyrannus vociferans*	N
Checkered white butterfly	*Pontia protodice*	N
Cliff swallow	*Petrochelidon pyrrhonota*	N
Common gallinule	*Gallinula galeata*	N
Common raven	*Corvus corax*	N
Common yellowthroat	*Geothlypis trichas*	N
Cooper's hawk	*Accipiter cooperii*	N
Costa's hummingbird	*Calypte costae*	N
Cottontail rabbitdesert cottontail	*Sylvilagus audubonii Sylvilagus sp.*	N
Eurasian collared-dove	*Streptopelia decaocto*	X
European starling	*Sturnus vulgaris*	X
Gray flycatcher	*Empidonax wrightii*	N
Greater roadrunner	*Geococcyx californianus*	N
Green heron	*Butorides virescens*	N
Hooded oriole	*Icterus cucullatus*	N
House finch	*Haemorhous mexicanus*	N
House sparrow	*Passer domesticus*	X
House wren	*Troglodytes aedon*	N
Least Bell's vireo	*Vireo bellii*	N

Lesser goldfinch	*Spinus psaltria*	N
Mallard	*Anas platyrhynchos*	N
Marsh wren	*Cistothorus palustris*	N
Mourning dove	*Zenaida macroura*	N
Northern mockingbird	*Mimus polyglottos*	N
Northern rough-winged swallow	*Stelgidopteryx serripennis*	N
Nuttall's woodpecker	*Dryobates nuttallii*	N
Orange-crowned warbler	*Leiothlypis celata*	N
Pacific slope flycatcher	*Empidonax difficilis*	N
Red winged blackbird	*Agelaius phoeniceus*	N
Red-eared slider	*Trachemys scripta elegans*	X
Red-tailed hawk	*Buteo jamaicensis*	N
Rock pigeon	*Columbia livia*	X
Say's phoebe	*Sayornis saya*	N
Song sparrow	*Melospiza melodia*	N
Spotted towhee	*Pipilo maculatus*	N
Warbling vireo	*Vireo gilvus*	N
Western fence lizard	*Sceloporus occidentalis*	N
Western tanager	*Piranga ludoviciana*	N
Western tiger swallowtail	*Papilio rutulus*	N
Western toad	*Anaxyrus boreas*	N
Willow flycatcher	*Empidonax traillii*	N
Wilson's warbler	*Cardellina pusilla*	N
Wrentit	*Chamaea fasciata*	N
Yellow-breasted chat	*Icteria virens*	N

4.5 Hydrological Resources

Regional Hydrological Resources

The Project area is located in the Southern California Coastal Subregion Hydrologic Unit (HU), within the Murietta Creek Watershed, Warm Springs Creek Subwatershed. Regional hydrological features include Diamond Valley Lake to the northeast, Skinner Reservoir to the southeast, and Adobe Spring to the west. French Valley Creek runs through the center of the Project area from north to south.

Hydrological Resources within the Project area

French Valley Creek is a seasonal channel that predominantly carries stormwater and irrigation runoff from adjacent residential communities. Land use in the surrounding area, known as French Valley, was historically dominated by low intensity agriculture such as dry pasture, hay production, and rural residential. The area has seen rapid residential development and urbanization over the past 20 years and much of the watershed area has been converted to single family homes. Within the Project area, the channel and riparian corridor is constrained to its historic pre-development width of 360 feet by non-federal levees that are protected from erosion by rock slope protection. French Valley Creek continues for approximately 2.5 miles southwest of the Project area, where it feeds into Warm Springs Creek and subsequently the Santa Margarita River.

The entire channel width of 360 feet is vegetated. Within the Project area, the placement of flood protection measures and subsequent revegetation activities have created a floodplain that spans the width of the channel. The channel carries winter stormwater runoff from adjacent development as well as nuisance irrigation runoff year-round. Irrigation runoff provides a constant source of water, allowing strongly hydrophytic and emergent vegetation like cattail (*Typha* sp.) to thrive in the low flow channel/thalweg of the creek. The remainder of the creek corridor is vegetated by riparian scrub or alkali scrub communities. A maintenance ramp is located within the Project area on the northwest slope of the channel.

4.6 Habitat Connectivity

The MSHCP identifies the Proposed Constrained Linkage 18 as passing through the Project area. Proposed Constrained Linkage 18 provides Live-In and Movement Habitat for common mammal species, such as bobcat. The pedestrian bridge will be narrow and would be designed to accommodate wildlife crossing for wildlife species including birds, large and small mammalians, reptiles, amphibians, and insects. The bridge will provide 8 feet of clearance from the bottom of the river channel to the bottom of the bridge deck at its lowest point and up to 12 feet at its highest in the middle of the channel, providing the minimal clearance sufficient for large mammals such as mule deer. In addition, bridge piers will be spaced 90 feet apart and allow sufficient horizontal space below the bridge for wildlife crossing. The Project is not anticipated to disrupt any wildlife corridors that pass through the Project's area of impact.

4.7 Regional Species of Concern

Table 3 is a compilation of special status species with potential to occur in the vicinity of the Project area and is based on database search results from CNDDB, CNPS, and IPaC. The habitat requirements of each species are described and a potential for each species to occur within the Project area is provided.

Table 3. Species of Concern within the Project Vicinity

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Amphibian Species						
Coast Range newt	*Taricha torosa*	Fed: State: CDFW:	-- -- SSC	Most commonly inhabits wet forests, valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral communities, but may utilize annual grassland and mixed conifer habitats. In Southern California, the species inhabits drier chaparral, oak woodlands, and grasslands. Adults require surface cover such as rocks, logs, mammal burrows, rock fissures, or human-made structures. Breeds within intermittent streams, rivers, permanent, and semi-permanent ponds, lakes, and large reservoirs. Breeds from fall through late spring. In the spring, adults return to subterranean summer aestivating sites; rarely travels more than 3,300 feet between aestivation burrow and breeding site. Migrations are delayed until as late as May at higher elevations of the Sierra (sea level-6,000 feet).	A	**Presumed Absent:** The Project area has wet habitat, but it lacks the dry chaparral, oak woodland, and grassland that the species inhabits in southern California. While the Project area contains a intermittent water feature, it is a flood drainage system and is unsuitable for the species' breeding ponds. There is only one nearby CNDDB occurrence of the species, approximately 8.50 miles west of the Project area, in Cole Canyon Natural Park (2001). Due to the lack of suitable breeding habitat and the lack of nearby occurrences, the species is presumed absent from the Project area.
Western spadefoot	*Spea hammondii*	Fed: State: CDFW:	-- -- SSC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground from most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March.	A	**Presumed Absent:** The nearest CNDDB occurrence of the species is approximately 1.58 miles east of the Project area (2017). However, the Project area mostly lacks sandy soils, making it unsuitable for the species to burrow in. Additionally, bullfrogs (*Rana catesbeiana*) were observed in the Project area during the July 24, 2019, general biological survey. The invasive bullfrog may prey upon the species and would prevent a population from persisting within the Project area. Due to the presence of invasive species and the lack of key habitat conditions, the species is

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						presumed absent.
Bird Species						
Bald eagle	*Haliaeetus leucocephalus*	Fed: State: CDFW:	D E FP	Species occurs near ocean shores, lakes, rivers, rangelands, and coastal wetlands for nesting and wintering; nesting occurs within one mile of a water source with abundant fish near mountain forests and woodlands. The species nests in large, old growth, or dominate live trees with open branches. Prefers ponderosa pines and often chooses the largest tree in a stand. Usually, will not nest near evident human disturbance. Prefers lower elevations and not found in the high Sierra Nevada. The breeding season is from February through July.	A	**Presumed Absent:** The Project area lacks large bodies of water for foraging habitat. There are no trees large enough for nesting habitat within the vicinity. There is one nearby CNDDB occurrence of the species, approximately 2.57 miles southeast of the Project area, near Lake Skinner (1997). Due to the lack of suitable nesting and foraging habitat, the species is presumed absent from the Project area.
Bell's sage sparrow	*Artemisiospiza belli belli*	Fed: State: CDFW:	-- -- WL	Inhabits low, fairly dense stands of shrubs, particularly stands of chamise (*Adenostoma sp.*) in chaparral and coastal sage scrub communities. Breeds from March through August.	A	**Presumed Absent:** The Project area lacks chaparral and coastal scrub. During the July 24, 2019 biological survey, *Adenostoma sp*. was not observed within the Project area. In addition, the nearest CNDDB occurrence of the species is approximately 0.275 miles northeast of the Project area (1999). Due to the lack of suitable habitat and the lack of recent occurrences, the species is presumed absent.
Bendire's thrasher	*Toxostoma bendirei*	Fed: State: CDFW:	-- -- SSC	Inhabits dry, open desert habitats, especially in areas with tall vegetation, cholla cactus, creosote bush, yucca, and juniper woodland. Can also be found near farmland where there are dense hedges and shrubs. It often runs across the desert floor and will stay close to the ground. The species is a ground forager. They nest in shrubs, cacti, and trees.	A	**Presumed Absent:** The Project area lacks desert habitat and associated plant species. Additionally, there are no recent, nearby CNDDB occurrences. Due to the lack of suitable habitat and recent, nearby occurrences, the species is presumed absent from the Project area.
Burrowing owl	*Athene cunicularia*	Fed: State: CDFW:	-- -- SSC	The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands,	A	**Presumed Absent:** The Project area lacks arid, open areas. It is marsh habitat and lacks open grasslands with burrow

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				and disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows, but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings when burrows are scarce. Breeding occurs March through August (below 5,300 feet).		complexes. The nearest CNDDB occurrence of the species is approximately 0.82 miles southeast of the Project area (2004). However, biological surveys conducted by Dokken biologists in 2019 and POWER Engineers in 2020 determined that there is no suitable habitat for this species within the Project area. The species is presumed absent due to a lack of suitable habitat within the Project area despite nearby occurrences.
California horned lark	*Eremophila alpestris actia*	Fed: State: CDFW:	-- -- WL	Inhabits open areas with low, sparse vegetation lacking trees and large shrubs of grasslands, hills, mountain meadows, open coastal plains, fallow grain fields, alpine dwarf-shrub habitat, and alkali flats. Less common in mountain regions, on the North Coast, and in coniferous or chaparral habitats. Species is a ground nester and breeds from March through July (sea level-above the tree line).	A	**Presumed Absent:** The Project area lacks the open habitat, meadows, and plains suitable for the species. In addition, the nearest CNDDB occurrence of the species is approximately 3.31 miles southwest of the Project area (1998). Due to the lack of suitable, open habitat, and the lack of recent occurrences, the species is presumed absent from the Project area.
Coastal California gnatcatcher	*Polioptila californica californica*	Fed: State: CDFW:	T -- SSC	Inhabits arid washes, mesas, and slopes of coastal hills dominated by dense, low-growing, drought-deciduous shrubs, and subshrubs of coastal sage scrub. May also use chaparral, grassland, and riparian communities when adjacent to or intermixed with sage scrub vegetation. Breeds February through August (sea level-2,500 feet).	A	**Presumed Absent:** The Project area lacks coastal habitat and sage scrub vegetation. The nearest CNDDB occurrence of the species is approximately 2.2 miles southwest of the Project area (2017); Therefore, the species is presumed absent from the Project area due to a lack of suitable habitat and local occurrences.
Cooper's hawk	*Accipiter cooperii*	Fed: State: CDFW:	-- -- WL	Species most often occurs in open, interrupted, or marginal woodlands throughout California. Nests in forest habitats, usually near open water in conifer or deciduous riparian areas. Most frequently uses dense stands of live oak, riparian deciduous, and other forest habitats. Breeds from March through August. Occurs from	A	**Presumed Absent:** The Project area lacks open water habitat as well as live oak, deciduous, or coniferous forest habitat. Additionally, there is only one nearby CNDDB occurrence, approximately 9.58 miles northeast of the Project area (2006). Due to the lack of suitable habitat and the lack of nearby occurrences, the species is

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				elevations near sea level to 9,000 feet.		presumed absent from the Project area.
Ferruginous hawk	*Buteo regalis*	Fed: State: CDFW:	-- -- WL	Inhabit open areas such as grasslands, sagebrush, saltbush-greasewood shrublands, and edges of pinyon-juniper forests. Prefer to forage in grasslands with abundant small mammal populations. The species nests on lone trees, cliffs, utility structures, outcrops, boulders, shrubs, knolls, or haystacks. If they do ground nest, it will be on a slope or hill crest.	HP	**Low to Medium Potential:** The Project area lacks open grasslands. It also lacks suitable nesting sites, as the trees within the Project area are not large enough and there are no boulders or rocky outcrops. Regardless, this species is known to forage and perch in parks, quiet neighborhoods, fields, backyard bird feeder, and streets with trees. The nearest CNDDB occurrence of the species is approximately 3.64 miles south of the Project area (1989). Although the species could forage and perch within the Project area, due to the lack of recent occurrences and the lack of suitable nesting sites, the species has a low to medium potential to occur within the Project area.
Golden eagle	*Aquila chrysaetos*	Fed: State: CDFW:	-- -- FP	Inhabits rolling foothills, mountain areas, sage-juniper flats, and desert communities. Requires open terrain for hunting, often utilizing rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, cliffs, rock outcrops, grasslands, and early successional stages of forest and shrub habitats. Territory is estimated to average 36 mi^2 in southern California and 48 mi^2 in northern California. Nests on cliffs of all heights and in large trees in open areas; may reuse previous nest sites. Breeds from late January through August (0-11,500 feet).	A	**Presumed Absent:** The Project area lacks mountain and desert communities. It also lacks cliffs and large trees for nesting. In addition, the area within the Project area is not open enough to serve as ideal foraging habitat. The nearest CNDDB occurrence of the species is approximately 6.96 miles northwest of the Project area (1974). Due to the lack of suitable nesting and foraging habitat, and the lack of recent occurrences, the species is presumed absent from the Project area.
Least Bell's vireo	*Vireo bellii pusillus*	Fed: State: CDFW:	E E --	Summer resident of southern California inhabiting low riparian habitats in the vicinity of water and dry river bottoms. Prefers willows, *Baccharis sp.*, mesquite, and other low, dense vegetation as nesting sites.	HP	**Present:** During the July 24, 2019 general biological survey, willows and *Baccharis sp.* were observed within the Project area. Additionally, the Project area is located about a drying river bottom with low, dense

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				Forages in dense brush and occasionally tree tops (below 2,000 feet).		vegetation. The nearest CNDDB occurrence of the species is approximately 3.07 miles southwest of the Project area (1999). Additionally, Busby Biological Services conducted a focused biological survey to identify occurrences of least Bell's vireo within the Project area. On July 13, 2020, an individual was observed within French Valley Creek less than 300 feet north of the proposed pedestrian bridge site. Occurrences were also noted in 2012 both north and south of the bridge as part of the WRMSHCP Biological Monitoring Program. Due to the presence of suitable habitat and associated plant species and an observation of this species near the Project site, the species has a high potential to occur.
Loggerhead shrike	*Lanius ludovicianus*	Fed: State: CDFW:	-- -- SSC	The species is associated with open canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Inhabits open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Rarely found in urbanized areas but will inhabit open cropland. Nests are built on stable branches in dense shrubs or trees. Breeds from March through May.	A	**Presumed Absent:** The Project area lacks open habitats with scattered shrubs. The nearest CNDDB occurrence of the species is approximately 1.49 miles southwest of the Project area (2006). Due to the disturbed nature of the Project area and the lack of suitable habitat, the species is presumed absent.
Northern harrier	*Circus hudsonius*	Fed: State: CDFW:	-- -- SSC	Species occurs in flat or hummocky open areas of tall, dense grasses and moist or dry shrubs. Inhabits meadows, grasslands, open rangelands, desert sinks, and fresh or saltwater emergent wetland communities. Nesting occurs on the ground within	HP	**Presumed Absent:** The Project area does not contain any meadows or grasslands, and vegetation within the channel is too dense for the species. Additionally, there is not suitable foraging habitat in or around the Project area to support a raptor of this

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				grasslands, grain fields, sagebrush, or other shrubby vegetation. Nest sites are often chosen at marsh edges or in proximity to water. Breeds April through September (0-5,700 feet).		size. The nearest recent CNDDB occurrence of the species is approximately 6.3 miles north of the Project area (2006). Due to the absence of potentially suitable habitat and with no local occurrences, the species is presumed to be absent from the Project area.
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	Fed: State: CDFW:	-- -- WL	Inhabits steep, often rocky hillsides with grass and forb patches or shrubless, grassy slopes in proximity to rock outcrops of southern California coastal sage scrub and open mixed chaparral communities. Generally absent from dense, unbroken stands of coastal sage scrub and chaparral. Breeds March to June.	A	**Presumed Absent:** The nearest CNDDB occurrence of the species is approximately 0.27 miles northeast of the Project area (1999). However, the Project area is located about a drying, marshy river bottom and contains riparian features. It lacks the open, sparse chaparral habitat preferred by the species. Due to the lack of suitable habitat, the species is presumed absent.
Southwestern willow flycatcher	*Empidonax traillii extimus*	Fed: State: CDFW:	E -- --	Breeds in riparian habitats characterized by dense vegetation in proximity to open water or saturated soil. Species is associated with dense willow-covered islands and riparian habitats at elevations up to 8,000 feet. Often in proximity to rivers, swamps, lakes, reservoirs, and other wetlands. Historically, the species nested in native vegetation, but will also use thickets of non-native tamarisk and Russian olive. Breeds in April through August.	HP	**High Potential:** The Project area contains native willow species as well as non-native plants that the species will utilize; however, it lacks open water habitat. The river that occurs within the Project area is marshy and open water only occurs in small ponds as a result of summer nuisance water from adjacent developments. Additionally, there are no recent, nearby CNDDB occurrences. During protocol-level surveys for SWFL conducted by permitted Busby Biological Services biologists on June 1, 2020, two willow flycatchers were detected responding to a call playback. The willow flycatcher sightings occurred early in the second survey window, the time of year when SWFL are establishing breeding territories but also the time of year when subspecies *E.t. brewsterii* or *E.t. edastus* may still be present and singing while migrating through southern California

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						(Sogge 2010). Because no willow flycatchers were detected during the subsequent three surveys, the two flycatchers detected during the second survey were likely one of the other migrant willow flycatcher subspecies and not breeding SWFL. Due to the potential observation of the species and presence of suitable vegetation, this species is presumed to have a high potential to occur.
Swainson's hawk	*Buteo swainsoni*	Fed: State: CDFW:	-- T --	Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa fields, or grain fields that support a stable rodent prey base. Breeds March to late August.	A	**Presumed Absent:** The Project area contains riparian areas, but it lacks large trees suitable for nesting. It also is largely surrounded by housing developments and lacks suitable foraging habitat. Additionally, the species is possibly extirpated from the only nearby CNDDB occurrence of the species, approximately 7.38 miles southwest of the Project area (1933). Due to the lack of suitable nesting habitat and its possible extirpation from nearby occurrences, the species is presumed absent from the Project area.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Tricolored blackbird	*Agelaius tricolor*	Fed: State: CDFW:	-- T SSC	Inhabits freshwater marsh, swamp, and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey, and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tulles, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August, but may extend until October or November in the Sacramento Valley region.	HP	**High Potential:** The only nearby CNDDB occurrence of the species is along the same riverbed that runs through the Project area, approximately 0.23 miles southwest (2015). The Project area contains marshy riverbed and thick, dense cattail habitat. Small pockets of open water occur at the intersection of Highway 79 and Blue Spruce Lane, approximately 0.4 miles southwest of the Project area. Due to the presence of suitable cattail stand nesting habitat and recent, nearby occurrences along the same riverbed that goes through the Project area, the species has a high potential to occur.
Yellow-billed cuckoo	*Coccyzus americanus*	Fed: State: CDFW:	-- T --	Species inhabits riparian forests, along broad, lower flood bottoms of larger river systems. Nests in large blocks of riparian jungles often mixed with cottonwoods. Nesting appears to be preferred in riparian forest habitats with a dense understory; requires water near nesting site. Breeds June to August.	A	**Presumed Absent:** The nearest historical (1950) CNDDB occurrence of this species is located approximately 9.3 miles south of the Project area within the Santa Margarita River. The Project area includes willow scrub riparian habitat; however, this vegetation community does not consist of riparian jungle habitat and lacks cottonwood trees. Additionally, the water present on-site is intermittent. Due to a lack of potentially suitable habitat and with no recent or local occurrences, the species is presumed to be absent.
White-tailed kite	*Elanus leucurus*	Fed: State: CDFW:	-- -- FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, will roost in saltgrass and Bermuda grass. Often found near	HP	**Presumed Absent:** The Project area contains saltgrass and willow plant species, as observed in the July 24, 2019 general biological survey. However, there are no large trees within the Project area that could serve as suitable nesting habitat for this species and the Project is not situated near deciduous woodland or

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				agricultural lands. Nests are placed near the tops of dense oak, willow, or other tree stands. Breeds February through October.		foothill grassland habitat. Additionally, the nearest recent CNDDB occurrence of the species is approximately 6.72 miles northeast of the Project area (2006). Due to the lack of suitable nesting habitat and with no local occurrences, the species is presumed absent from the Project area.
Yellow warbler	*Setophaga petechia*	Fed: State: CDFW:	-- -- SSC	Breeds in several southern California mountain ranges and throughout most of San Diego County. Species prefers to nest in areas with trees and shrubs typical of low, open-canopy riparian woodland. Species has been known to breed in riparian woodlands from coastal and desert lowlands and montane shrubbery in open conifer forests. Occurs up to 8,000 feet in the Sierra Nevada. Breeds April to August.	HP	**High Potential:** The Project area contains riparian communities, where this species is known to breed and inhabit. There are no recent, nearby CNDDB occurrences. However, Busby Biological Services conducted a focused biological survey on July 13, 2020 to identify occurrences of special status species within the Project area. During this survey, an individual of this species was observed within French Valley Creek less within 300 feet north of the proposed pedestrian bridge site. Due to the observed occurrences and presence of suitable vegetation, this species is presumed to have a high potential to occur.
Fish Species						
Arroyo chub	*Gila orcuttii*	Fed: State: CDFW:	-- -- SSC	The species is only native in streams from Malibu Creek to the San Luis Rey River basin. Requires vegetated streams with muddy or sandy bottoms and slow moving or backwater areas. The species feeds on algae, water fern, and invertebrates (such as insects and mollusks). Spawning occurs in pools or edge habitat from February to August with a peak in June and July.	A	**Presumed Absent:** The Project area does contain a flood drainage channel and associated wetland riparian habitat; however, the species is native to along the coast from Malibu Creek to the San Luis Rey River Basin. Additionally, there is only one nearby CNDDB occurrence of the species, approximately 7.73 miles southwest of the Project area in Murrieta Creek (1998). Due to the lack of suitable stream habitat and the species' pattern of occurrence, it is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Southern California steelhead - DPS	*Oncorhynchus mykiss irideus*	Fed: State: CDFW:	E -- --	Southern California and central California steelhead utilize rivers and creeks from Pajaro River south to Santa Maria River. Spawning occurs in coastal watersheds while rearing occurs in freshwater or estuary habitats prior to emigrating to the ocean in the winter and spring. Preferred spawning sites contain gravel substrate with sufficient water flow and riverine cover. Rearing habitat contains sufficient feeding with associated riparian forest containing willow and cottonwoods. Migration upstream for reproduction occurs from October to May with spawning occurring January to April.	A	**Presumed Absent:** The Project area contains a flood drainage channel; however, the section of the channel that goes through the Project area is shallow, slow moving, and lacks a gravel substrate that is suitable for the species. Additionally, there are no CNDDB occurrences of this species in the vicinity of the Project area. Due to the lack of suitable habitat and with no recent local occurrences, the species is presumed to be absent from the Project area.
Invertebrate Species						
California fairy shrimp	*Linderiella occidentalis*	Fed: State: CDFW:	E -- --	The California fairy shrimp belongs to the family Linderiellidae. Measuring approximately 9 to 10 mm, California fairy shrimp are smaller than fairy shrimps in other families. Little is known about the historical range of the species; the California fairy shrimp was identified in 1990 and is known to occur in vernal pool habitats throughout the Central Valley and Southern California. Remaining populations of this species are fragmented due to the extensive loss of vernal pool habitat in California. However, individuals of this species have been identified all over the state.	A	**Presumed Absent:** The Project area lacks vernal pool communities. Additionally, there are no nearby CNDDB occurrences of this species. Due to a lack of vernal pool habitat and with no local occurrences, the species is presumed absent.
Quino checkerspot butterfly	*Euphydryas editha quino*	Fed: State: CDFW:	E -- --	Historically inhabited coastal sage scrub habitat in southern California and northern Baja California. Current distribution is limited to southwestern Riverside and San Diego Counties. Larvae associated with *Plantago erecta* or *Castilleja exserta* plants. Adults	A	**Presumed Absent:** The Project area lacks the species' host plants, as they were not observed during the July 24, 2019 biological survey. The CNDDB does report an occurrence of the species within the general area of the USGS 7.5-minute

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				emerge in early to mid-spring.		quadrangle of Bachelor Mountain (2003). However, the occurrence is not specific to a particular area within the quadrangle. The nearest specific (1999) CNDDB occurrence is located on Bachelor Mountain, approximately 2.5 miles from the Project site. Due to the lack of the species' host plant within the Project area, the species is presumed absent.
Riverside fairy shrimp	*Streptocephalus woottoni*	Fed: State: CDFW:	E -- --	A Ventura, Los Angeles, Orange, Riverside and San Diego County vernal pool endemic species. Inhabits deep ephemeral vernal pools of greater than 12 inches within chaparral, coastal sage scrub, and grassland communities. Species requires pools filled with sufficient rainfall; emerges late in the season within warm waters.	A	**Presumed Absent:** The Project area lacks vernal pool communities. The nearest CNDDB occurrence of the species is approximately 0.94 miles southwest of the Project area (2006). Despite nearby, recent occurrences, the species is presumed absent due to the lack of vernal pool habitat, which the species requires.
San Diego fairy shrimp	*Branchinecta sandiegonensis*	Fed: State: CDFW:	E -- --	Restricted to vernal pools and other ephemeral basins in coastal Orange and San Diego Counties and in northwestern Baja California. A habitat specialist found in shallower pools that range in depth from 2 to 12 inches. Prefers vernal pool complexes, which typically include between 5 and 50 vernal pools. Vernal pools within a complex are generally hydrologically connected.	A	**Presumed Absent:** The Project area lacks vernal pool communities. There is one nearby CNDDB occurrence of the species, approximately 6.73 miles west of the Project area (2017). Despite recent occurrences, the species is presumed absent due to the lack of vernal pool habitat, which the species requires.
Vernal pool fairy shrimp	*Branchinecta lynchi*	Fed: State: CDFW:	T -- --	In California, species inhabits portions of Tehama county, south through the Central Valley, and scattered locations in Riverside County and the Coast Ranges. Species is associated with smaller and shallower cool-water vernal pools approximately 6 inches deep with short periods of inundation. In the southernmost extremes of the range, the species occurs in large, deep, cool-water pools. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids.	A	**Presumed Absent:** The Project area lacks vernal pool communities. The nearest CNDDB occurrence of the species is approximately 2.96 miles southeast of the Project area (2010). Despite nearby, recent occurrences, the species is presumed absent due to the lack of vernal pool habitat, which the species requires.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				The shrimp are temperature sensitive, requiring pools below 50°F to hatch and dying within pools reaching 75°F. Young emerge during cold-weather winter storms.		
Mammal Species						
Dulzura pocket mouse	*Chaetodipus californicus femoralis*	Fed: State: CDFW:	-- -- SSC	Inhabits a variety of habitats, particularly coastal scrub, chaparral, and grasslands within San Diego County. Species occurs in brushy areas, but may be attracted to grass-chaparral edges. The parent species (*C. californicus ssp*.) elevation range occurs from sea level to 7,900 feet and birth April-July.	A	**Presumed Absent:** The Project area lacks open grassland, chaparral, and coastal scrub habitat. In addition, the nearest CNDDB occurrence of the species is approximately 5.60 miles southwest of the Project area (2005). Due to the lack of suitable habitat, the species is presumed absent from the Project area.
Jacumba pocket mouse	*Perognathus longimembris internationalis*	Fed: State: CDFW:	-- -- SSC	The species inhabits desert willow wash, disturbed grassland, shrubland, coastal sage scrub, and chaparral habitats. Prefers sandy, gravelly, alluvial substrate. Associated plant communities include mesquite, acacia scrub, and *Opuntia sp*. The species burrows during the day and forages above ground at night.	A	**Presumed Absent:** The Project area lacks some of the species' preferred substrate. It also lacks desert, shrubland, and chaparral habitats. Additionally, there is only one nearby CNDDB occurrence of the species, approximately 8.74 miles southeast of the Project area (1993). Due to the lack of suitable substrate, habitat, and occurrences, the species is presumed absent.
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	Fed: State: CDFW:	-- -- SSC	The species inhabits grasslands, alluvial sage scrub, and coastal sage scrub between 550-2,650 feet. Fine, sandy soils are required for burrow construction. Breeding occurs between late spring through early fall and hibernation is believed to occur below ground from October to February.	A	**Presumed Absent:** The Project area lacks grassland habitat with fine soils. The nearest CNDDB occurrence of the species is approximately 3.64 miles south of the Project area (1993). Due to the lack of recent occurrences and the lack of suitable burrowing habitat, the species is presumed absent from the Project area.
Northwestern San Diego pocket mouse	*Chaetodipus fallax fallax*	Fed: State: CDFW:	-- -- SSC	Inhabits arid coastal and desert border areas of coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland communities. Species strongly associated	A	**Presumed Absent:** The Project area lacks rocky, gravelly soils. It also lacks arid coastal and desert habitats, including associated plant communities. The nearest CNDDB occurrence of the species is approximately 1.95 miles southeast of the

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				with rocky, gravelly or sandy substrates. Breeds March to May (0-6,000 feet).		Project area, along the edge of Lake Skinner (2004). Despite nearby occurrences, the species is presumed absent due to the lack of suitable habitat.
San Bernardino kangaroo rat	*Dipodomys merriami parvus*	Fed: State: CDFW:	E -- SSC	Species inhabits alluvial floodplains and adjacent upland habitat within San Bernardino, Menifee, and San Jacinto valleys with Riversidean alluvial fan sage scrub habitat.	A	**Presumed Absent:** The Project area is not within the San Bernardino, Menifee, or San Jacinto valleys. Additionally, the species is possibly extirpated from the nearest CNDDB occurrence of the species, approximately 4.38 miles southwest of the Project area (1989). Due to the lack of recent, nearby occurrences, the species is presumed absent.
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	Fed: State: CDFW:	-- -- SSC	Inhabits coastal sage scrub communities in Southern California. Species requires intermediate canopy stages of shrub and herbaceous habitats for cover and breeding. Breeds year-round, with a peak in April and May.	A	**Presumed Absent:** The Project area lacks coastal sage scrub communities inhabited by the species. The nearest CNDDB occurrence of the species is approximately 1.63 miles west of the Project area (2007). Despite nearby occurrences, the species is presumed absent.
San Diego desert woodrat	*Neotoma lepida intermedia*	Fed: State: CDFW:	-- -- SSC	The species inhabits coastal scrub of southern California, from San Diego County to San Luis Obispo County. Prefers moderate to dense canopies, rocky outcrops, rocky cliffs, and slopes. Inhabits most desert habitats, particularly Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, and sagebrush communities. The species is active yearlong and usually nocturnal. Breeds from October to May.	A	**Presumed Absent:** The Project area lacks coastal scrub and desert habitats. It also lacks rocky outcrops and slopes. There is one nearby CNDDB occurrence of the species, approximately 8.20 miles southeast of the Project area (1997). Due to the lack of recent, nearby occurrences and the lack of suitable habitat, the species is presumed absent from the Project area.
Southern grasshopper mouse	*Onychomys torridus ramona*	Fed: State: CDFW:	-- -- SSC	Species prefers alkali and desert scrub habitats with low to moderate shrub cover and friable soils. Breeds from May to July, but may begin as early as January under ideal habitat conditions.	A	**Presumed Absent:** The Project area lacks the desert habitat preferred by the species. In addition, there is one nearby CNDDB occurrence of the species, approximately 7.65 miles northwest of the Project area (1932). Due to the lack of recent, nearby

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						occurrences and the lack of habitat, the species is presumed absent.
Stephens' kangaroo rat	*Dipodomys stephensi*	Fed: State: CDFW:	E T --	Inhabits annual and perennial grasslands and coastal scrub or sagebrush with sparse canopy cover. Prefers sparse grassland over dense grassland habitats and species prefers buckwheat, chamise, brome grass, and filaree as food sources. Species prefers sandy and gravely soils, of level to gently sloping habitat with slopes less than 50%. Requires patches of fine-grained soils or dusty pockets for sand bathing. Burrows frequently found in clusters. Likely breeds April to June (180-4,100 feet).	A	**Presumed Absent:** The Project area lacks grassland and coastal scrub habitat. It does include some of the species' preferred plant species; however, it lacks ideal burrowing space and soils. The nearest CNDDB occurrence of the species is approximately 0.35 miles northwest of the Project area (1988). Despite nearby occurrences and the presence of associated plant species, the species is presumed absent due to the lack of suitable burrowing habitat.
Western mastiff bat	*Eumops perotis californicus*	Fed: State: CDFW:	-- -- SSC	Inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Prefers open, rugged, rocky areas where suitable crevices are available for day roosts. Roots in cliff face crevices (usually granite or consolidated sandstone), high buildings, trees, and tunnels. Roosting sites must have a minimum 10-foot vertical drop. Births early April through August or September (sea level-8,475 feet).	A	**Presumed Absent:** The Project area lacks open, arid habitats and rugged areas with rocky crevices. Additional options for roosting sites are not present within the Project area. The nearest CNDDB occurrence of the species is approximately 7.37 miles southwest of the Project area (1991). Due to the lack of recent, nearby occurrences and the lack of suitable roosting habitat, the species is presumed absent from the Project area.
Western yellow bat	*Lasiurus xanthinus*	Fed: State: CDFW:	-- -- SSC	Species known in California only from Los Angeles and San Bernardino Counties south to the Mexican border. Inhabits valley foothill riparian, desert riparian, desert wash, and palm oasis habitats in proximity to water. Species utilizes trees and palms for roosting and maternity colonies. Births in June and July (below 2,000 feet).	A	**Presumed Absent:** The Project area lacks suitable trees and palms for roosting. It also lacks desert habitats. Additionally, the nearest CNDDB occurrence of the species is approximately 7.74 miles northwest of the Project area (1982). Due to the lack of suitable habitat and the lack of recent, nearby occurrences, the species is presumed absent.
Reptile Species						

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
California glossy snake	*Arizona elegans occidentalis*	Fed: State: CDFW:	-- -- SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers microhabitats of open areas and loose soils. A nocturnal species that hides underground in rocks and burrows during the day. The species can dig its own burrows or use existing ones. Lays from 3 to 23 eggs (more often 5 to 12) in June and July. Eggs hatch late summer and early fall. The species is found from below sea level to around 7,200 feet.	A	**Presumed Absent:** The Project area lacks arid habitat, as it is in close proximity to water drainage features. Additionally, the soils within the Project area are not suitable for burrow construction by this species. The nearest CNDDB occurrence of the species is approximately 6.14 miles southwest of the Project area (1946). Due to the lack of recent occurrences and the lack of suitable habitat, the species is presumed absent from the Project area.
Coast horned lizard	*Phrynosoma blainvillii*	Fed: State: CDFW:	-- -- SSC	Inhabits valley-foothill hardwood, conifer forest, and riparian habitats, as well as pine-cypress, juniper woodland, and annual grasslands with sandy areas, washes, or flood plains. Frequently found near ant hills. Egg laying occurs from May to June, and some females may lay two clutches per year (sea level-8,000 feet).	HP	**Low to Moderate Potential:** The Project area includes riparian habitat and some sandy soils. In addition, the nearest CNDDB occurrence of the species is approximately 1.7 miles southwest of the Project area (2003). Due to the presence of some suitable habitat and nearby occurrences, the species is presumed to have a low to moderate potential to occur.
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	Fed: State: CDFW:	-- -- SSC	Inhabits semi-arid brushy or shrubby areas and chaparral in canyons, rocky hillsides, and plains. Species is an active forager and is susceptible to high levels of vehicle mortality. Requires small mammal burrows for refuge and overwintering sites. Egg laying probably occurs between May and August (below sea level-7,000 feet).	A	**Presumed Absent:** The Project area lacks arid brushy chaparral and rocky habitat. In addition, the Project area does not contain suitable habitat to support small mammal populations; therefore, it does not contain burrow systems. Additionally, there are no recent, nearby CNDDB occurrences. Due to the lack of habitat and occurrences, the species is presumed absent.
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	Fed: State: CDFW:	-- -- SSC	Inhabits hot, dry areas with sparse foliage and open areas in forests, woodland, chaparral, and riparian areas. The species is diurnal. Breeding occurs from May to August.	A	**Presumed Absent:** The Project area does contain riparian areas; however, the area is moister and denser than the species prefers. The nearest CNDDB occurrence of

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				Their diet primarily includes termites as well as other lizards, insects, spiders, scorpions, and small animals. Occurs from sea level to 7,000 feet.		the species is approximately 4.93 miles north of the Project area (1997). Due to the lack of suitable vegetation and the lack of recent occurrences, the species is presumed absent.
Orange-throated whiptail	*Aspidoscelis hyperythra*	Fed: State: CDFW:	-- -- WL	Inhabits low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats, especially in areas with summer morning fog. Prefers washes and other sandy areas with loose soils and patches of brush and rocks for cover and foraging. Reproduces April to July; young emerge August to September (0-3,400 feet).	A	**Presumed Absent:** The Project area lacks coastal and chaparral habitat. It also lacks loose soils. The nearest CNDDB occurrence of the species is approximately 1.45 miles southeast of the Project area (1995). Due to the lack of habitat and the lack of recent occurrences, the species is presumed absent from the Project area.
Red-diamond rattlesnake	*Crotalus ruber*	Fed: State: CDFW:	-- -- SSC	Inhabits coastal chaparral, oak and pine woodland, cultivated areas, and arid desert scrub communities. Requires rocky areas or areas of dense vegetation. Utilizes rodent burrows, cracks in rocks, and surface cover objects for cover. Species is seasonally active, with the greatest activity occurring from March to June. Young are live-born from mid-August to October in quiet, safe locations (0-3,000 feet).	A	**Presumed Absent:** The Project area lacks arid habitat and rocky substrates. In addition, the Project area is unlikely to support mammal populations and burrows. The nearest CNDDB occurrence of the species is approximately 3.89 miles south of the Project area (2006). The species is presumed absent due to the lack of suitable habitat within the Project area.
San Diego banded gecko	*Coleonyx variegatus abbotti*	Fed: State: CDFW:	-- -- SSC	Species inhabits coastal scrub and chaparral habitats from Ventura County south to Mexico. Species most often occurs in granite or rocky outcrops. Mating occurs from April to May and hatchlings appear July through November.	A	**Presumed Absent:** The Project area lacks rocky outcrops and coastal habitat. In addition, the nearest CNDDB occurrence of the species is approximately 7.88 miles northeast of the Project area (1999). Due to the lack of suitable habitat and the lack of recent, nearby occurrences, the species is presumed absent.
Southern California legless lizard	*Anniella stebbinsi*	Fed: State: CDFW:	-- -- SSC	Occurs in moist, warm, loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert	A	**Presumed Absent:** The Project area does not include any dune, chaparral, woodland, wash, or scrub habitat, and lacks the plant species that indicate potentially suitable

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.		habitat. There is one nearby CNDDB occurrence of the species, approximately 2.31 miles southeast of the Project area (2000). Despite the recent local occurrence, the species is presumed to be absent from the Project area.
Two-striped gartersnake	*Thamnopjis hammondii*	Fed: State: CDFW:	-- -- SSC	Species is diurnal, highly aquatic, and inhabits locations in proximity to permanent or semi-permanent bodies of water bordered by dense vegetation. Can be found around pools, creeks, cattle tanks, and other water sources. Associated with oak woodland, chaparral, brushland, and coniferous forest. Seasonally alters habitats: in summer, occupies streamside sites, and in winter, occupies nearby uplands. Thought to utilize holes, mammal burrows, crevices, and surface objects as night cover. Live young are born in late July and August, usually in secluded sites, such as under the loose bark of rotting logs or in dense vegetation near pond or stream margins (0-7,000 feet).	HP	**Presumed Absent:** The Project area includes water features and dense vegetation that could support the species; However, the local stream is intermittent and would not sustain this highly aquatic snake. Additionally, the Project area lacks mammal burrows that could serve as cover. There is one nearby CNDDB occurrence of the species, approximately 8.51 miles southwest of the Project area in Cole Canyon Natural Park (2001). Due to the lack of suitable aquatic habitat features as well as the lack of mammal burrows and nearby occurrences, the species is presumed to be absent from the Project area.
Western pond turtle	*Emys marmorata*	Fed: State: CDFW:	-- -- SSC	A fully aquatic turtle of ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic vegetation. Suitable habitat includes woodland, forests, and grasslands. Requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August (sea level to 4,700 feet).	HP	**Low Potential:** The Project area contains a flood drainage channel and associated riparian vegetation. Cattails were observed within the channel during the July 24, 2019 biological survey. Additionally, the nearest CNDDB occurrence of the species is approximately 1.77 miles southwest of the Project area, along French Valley Creek, which is connected to the water feature in the Project area (2017). The Project area lacks deep permanent water but

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						sometimes contains open ponded water, which is potentially suitable habitat for the species. Furthermore, Riverside County Parks trapping and radiotelemetry studies have documented the species approximately 0.5 miles west of the Project area.
Plant Species						
Alkali marsh aster	*Almutaster pauciflorus*	Fed: State: CNPS:	-- -- 2B.2	A perennial herb inhabiting alkaline soils in meadows, seeps, and wetland-riparian habitats. Flowers June-October (790-2,630 feet).	HP	**Presumed Absent:** The Project area contains alkaline soils and wetland-riparian habitat. There is a historic (1937) CNDDB occurrence of the species located approximately 7.40 miles southwest of the Project area. Most recent occurrences of this species occur south of Death Valley near the Nevada border and the species may be locally extirpated. Despite the presence of potentially suitable habitat, the species is presumed absent from the Project area due to its pattern of occurrence.
Bottle liverwort	*Sphaerocarpos drewiae*	Fed: State: CNPS:	-- -- 1B.1	An ephemeral liverwort native to California, inhabiting openings in chaparral and coastal scrub habitats (300-2,000 feet).	A	**Presumed Absent:** The Project area does not include chaparral or coastal scrub communities. Additionally, there are no local CNDDB occurrences of this species. Due to the absence of habitat and lack of local occurrences, this species is presumed absent from the Project area.
California beardtongue	*Penstemon californicus*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb native to California inhabiting chaparral, yellow pine forest, and pinyon/juniper woodland communities. Blooms May-June (3,900-7,500 feet).	A	**Presumed Absent:** There are no recent, nearby CNDDB occurrences. The Project area lacks the forested habitats preferred by the species. Additionally, the Project area is located approximately 2,500 feet below the species' elevation range. Due to the lack of habitat and the elevation of the Project area, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
California Orcutt grass	*Orcuttia californica*	Fed: State: CNPS:	E E 1B.1	An annual herb inhabiting vernal pool communities. Flowers April-August (50-2,200 feet).	A	**Presumed Absent:** The nearest CNDDB occurrence of the species is approximately 3.12 miles south of the Project area (1991). However, the Project area lacks vernal pool habitat; therefore, the species is presumed absent.
Chaparral sand-verbena	*Abronia villosa var. aurita*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting sandy soils of chaparral, coastal sage scrub, and desert dune communities. Flowers March-September (250-5,250 feet).	A	**Presumed Absent:** The Project area lacks sandy soils and preferred plant communities. The nearest CNDDB occurrence of the species is approximately 7.07 miles southwest of the Project area (1994). Due to the lack of suitable habitat and recent, nearby occurrences, the species is presumed absent.
Coulter's goldfields	*Lasthenia glabrata ssp. coulteri*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting playas, coastal salt marshes, swamps, and vernal pool communities. Flowers from February-June (0-4,000 feet).	HP	**Low to Moderate Potential: T**he nearest CNDDB occurrence of the species is approximately 1.95 miles northwest of the Project area (2011). The Project area contains salty soils as well as alkali marsh habitat that provides potentially suitable habitat for this species. Due to the presence of potentially suitable habitat features as well as the recent local occurrence, this species is presumed to have a low to moderate potential to occur within the Project area.
Davidson's saltscale	*Atriplex serenana var. davidsonii*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting alkaline bluffs of coastal bluff scrub or coastal scrub communities. Flowers April-October (30-660 feet).	A	**Presumed Absent:** The Project area lacks coastal habitats and landforms and is outside of the species' elevation range. Additionally, there is only one nearby CNDDB occurrence of the species, approximately 8.46 miles northeast of the Project area (2015). Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent.
Intermediate	*Calochortus weedii*	Fed:	--	A perennial bulbiferous herb inhabiting	A	**Presumed Absent:** The Project area lacks

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
mariposa-lily	*var. intermedius*	State: CNPS:	-- 1B.2	calcareous soils and dry, rocky, open slopes within chaparral, coastal scrub, valley grassland, and foothill grassland communities. Flowers May-July (350-2,800 feet).		dry, rocky, open slopes and chaparral, coastal scrub, and grassland communities. The nearest CNDDB occurrence of the species is approximately 2.07 miles southwest of the Project area (2010). Due to the lack of habitat, the species is presumed absent.
Jaeger's bush milk-vetch	*Astragalus pachypus var. jaegeri*	Fed: State: CNPS:	-- -- 1B.1	A perennial shrub inhabiting sandy or rocky soils of chaparral, cismontane woodland, coastal scrub, valley grassland, and foothill grassland communities within dry ridges, valleys and open sandy slopes. Flowers December-June (1,200-3,200 feet).	A	**Presumed Absent:** The Project area lacks suitable soils and chaparral, cismontane woodland, coastal scrub, and grassland communities. In addition, there are no recent, nearby CNDDB occurrences. Due to the lack of habitat and occurrences, the species is presumed absent.
Little mousetail	*Myosurus minimus ssp. apus*	Fed: State: CNPS:	-- -- 3.1	An annual herb inhabiting alkaline soils in valley and foothill grassland vernal pool communities. Flowers March-June (65-2,100 feet).	A	**Presumed Absent:** The Project area contains alkaline soils but lacks vernal pools. The nearest CNDDB occurrence of the species is approximately 6.03 miles north of the Project area (1993). Due to the lack of suitable habitat and with no recent nearby occurrences, the species is presumed absent.
Long-spined spineflower	*Chorizanthe polygonoides var. longispina*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting meadows within chaparral, valley grasslands, and coastal sage scrub habitats. Flowers April-July (100-4,920 feet).	A	**Presumed Absent:** The Project area lacks chaparral, grassland, and coastal scrub habitats. The species is considered extirpated from the nearest CNDDB occurrence, which is approximately 0.72 miles north of the Project area (2005). Due to the lack of occurrences and habitat, the species is presumed absent.
Many-stemmed dudleya	*Dudleya multicaulis*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb often found within clay and heavy soils of chaparral, coastal scrub, valley grassland, and foothill grassland communities. Flowers April-July (50-2,600 feet).	A	**Presumed Absent:** The Project area lacks clay soils and does not contain grassland and chaparral habitat. In addition, there are no recent, nearby CNDDB occurrences. Due to the lack of habitat and occurrences,

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						the species is presumed absent.
Mission Canyon bluecup	*Githopsis diffusa ssp. filicaulis*	Fed: State: CNPS:	-- -- 3.1	An annual herb native to California and Baja California, inhabiting disturbed areas in chaparral and wetlands. Blooms April-June (1,500-2,300 feet).	HP	**Presumed Absent:** There is a historical (1927) CNDDB occurrence of this species located approximately 10 miles east of the Project area. Species occurrences are concentrated near San Diego and around the Cuyamaca Rancho State Park and is possibly locally extirpated. Despite the presence of wetland habitat, the species is presumed to be absent due to the species' pattern of occurrence.
Mojave tarplant	*Deinandra mohavensis*	Fed: State: CNPS:	-- E 1B.3	An annual herb inhabiting mesic chaparral, coastal scrub and riparian scrub communities. Flowers May-January (2,100-5,250 feet). Plants are typically observed in seeps and along grassy swales and intermittent creeks. The most suitable habitat occurs in mountainous areas within microhabitats of low gradient streams and on gentle slopes with few shrubs and trees.	HP	**Presumed Absent:** There are no recent, nearby CNDDB occurrences. Additionally, the Project area is located approximately 800 feet below the species' elevation range. While the Project area does contain riparian scrub and an intermittent creek, it lacks mountainous features. Due to the lack of key habitat conditions, the species is presumed absent from the Project area.
Mud nama	*Nama stenocarpa*	Fed: State: CNPS:	-- -- 2B.2	An annual or perennial herb inhabiting intermittently wet areas including marshes, swamps, lake margins and riverbanks. Flowers January-July (15-1,640 feet).	A	**Presumed Absent:** The Project area lacks lake margin and riverbank habitat but contains marsh habitat. However, this species does not tolerate high-saline conditions, which are present on-site. Additionally, there are no recent local occurrences of this species on both CalFlora and CNDDB. Due to the lack of suitable habitat features and the species' lack of occurrence in the local area, it is presumed absent from the Project area.
Munz's onion	*Allium munzii*	Fed: State: CNPS:	E T 1B.1	A perennial herb inhabiting mesic and clay soils and grassy openings in coastal sage scrub, chaparral, cismontane woodland, coastal scrub, pinyon/juniper woodland, valley grassland, and foothill grassland.	HP	**Presumed Absent:** The Project area contains clay soils; however, the Project area does not contain suitable vegetation community types associated with this species. The nearest CNDDB occurrence

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				Flowers April-May (980-2,950 feet).		of the species is approximately 1.90 miles east of the Project area (2015). Despite a nearby occurrence, this species is presumed absent due to the lack of suitable habitat.
Nevin's barberry	*Berberis nevinii*	Fed: State: CNPS:	E E 1B.1	A perennial evergreen shrub inhabiting sandy, gravelly soils within washes, chaparral, cismontane woodland, coastal scrub, and riparian scrub communities. Flowers March-June (900-2,700 feet).	HP	**Presumed Absent:** The Project area contains riparian scrub habitat but lacks other suitable habitats, and there are no recent, nearby CNDDB occurrences. Despite the presence of suitable habitat, this species is presumed to be absent due to a lack of local occurrences.
Orcutt's brodiaea	*Brodiaea orcuttii*	Fed: State: CNPS:	-- -- 1B.1	A perennial herb native to California and Baja California, inhabiting meadows and vernal pools and associated with creosote bush scrub and wetland-riparian communities. Blooms May-July (0-5,300 feet).	HP	**Presumed Absent:** There are no recent, nearby CNDDB occurrences within 10 miles of the Project area. Additionally, the wetland features within the Project area do not include vernal pool habitat communities. Due to the lack of potentially suitable habitat features as well as a lack of local occurrences, this species is presumed to be absent from the Project area.
Parish's brittlescale	*Atriplex parishii*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting alkaline or clay soils of chenopod scrub, playas, or vernal pool communities. Flowers June-October (80-6,230 feet).	A	**Presumed Absent:** The Project area contains alkaline and clay soils but lacks vernal pool communities. The nearest CNDDB occurrence of the species is approximately 6.70 miles north of the Project area (1996). Due to the lack of suitable habitat, the species is presumed absent.
Parry's spineflower	*Chorizanthe parryi var. parryi*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting sandy or rocky openings of chaparral, coastal scrub, cismontane woodland, valley grassland, and foothill grassland communities. Flowers April-July (900-4,000 feet).	A	**Presumed Absent:** The Project area lacks rocky soils and chaparral, coastal scrub, woodland, and grassland communities. The nearest CNDDB occurrence of the species is approximately 1.18 miles south of the Project area (2003). Due to the lack of suitable habitat, the species is presumed

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						absent.
Prostrate vernal pool navarretia	*Navarretia prostrata*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting vernal pool, coastal scrub, meadows and seeps, and alkaline valley and foothill grassland communities. Flowers April-July (50-2,300 feet).	A	**Presumed Absent:** The Project area lacks vernal pool communities. Additionally, the nearby CNDDB occurrences of the species are concentrated on the Santa Rosa Plateau, approximately 9.11 miles southwest of the Project area (2005). Due to the lack of suitable habitat and the pattern of occurrences, the species is presumed absent.
Rainbow manzanita	*Arctostaphylos rainbowensis*	Fed: State: CNPS:	-- -- 1B.1	A shrub endemic to California, inhabiting granitic outcrops and chaparral. Flowers December-March (500-2,600 feet).	A	**Presumed Absent:** The Project area contains soils derived from granite; however, it lacks chaparral habitat and rocky outcrops. The nearest CNDDB occurrence of the species is approximately 8.70 miles southwest of the Project area (1999). Due to the lack of suitable habitat and recent, nearby occurrences, the species is presumed absent.
Round-leaved filaree	*Erodium macrophyllum*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting clay soils and open sites of valley and foothill grassland and cismontane woodland communities. Flowers March-May (50-3,940 feet).	A	**Presumed Absent:** The Project area does not contain suitable clay soils that could host this species. Additionally, there are no grasslands or woodlands present within the Project area. The nearest recent (2015) CalFlora occurrence of this species is approximately 3.7 miles south of the Project area. Due to a lack of habitat and with no local occurrences, this species is presumed to be absent from the Project area.
San Bernardino aster	*Symphyotrichum defoliatum*	Fed: State: CNPS:	-- -- 1B.2	A perennial rhizomatous herb inhabiting ditches, streams, and springs of cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic	HP	**Presumed Absent:** The Project area contains ditches, streams, and marsh habitat. However, recent local CNDDB occurrences of this species. Despite the presence of some suitable habitat features,

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				valley and foothill grassland communities. Flowers July-November (0-6,700 feet).		the species is presumed to be absent due to a lack of local occurrences.
San Diego ambrosia	*Ambrosia pumila*	Fed: State: CNPS:	E -- 1B.1	A perennial rhizomatous herb inhabiting sandy loams, clay, and occasionally alkaline soils within chaparral, coastal scrub, valley and foothill grassland, and vernal pool communities. Flowers April-October (65-1,360 feet).	A	**Presumed Absent:** The Project area contains suitable soils, but lacks chaparral, coastal scrub, and grassland habitat. The nearest CNDDB occurrence of the species is approximately 3.11 miles south of the Project area (2006). Due to the lack of suitable habitat, the species is presumed absent.
San Diego button-celery	*Eryngium aristulatum var. parishii*	Fed: State: CNPS:	E E 1B.1	An annual or perennial herb inhabiting vernal pools and marshes, or mesically in coastal scrub, valley grassland, and foothill grassland communities. Flowers April-June (65-2,030 feet).	HP	**Presumed Absent:** The Project area lacks vernal pools but does contain marsh habitat. However, all nearby CNDDB occurrences of the species are concentrated on the Santa Rosa Plateau, approximately 9.25 miles southwest of the Project area (2015). Due to the lack of certain habitat features and the species' pattern of occurrence, it is presumed absent from the Project area.
San Jacinto Valley crownscale	*Atriplex coronata var. notatior*	Fed: State: CNPS:	E -- 1B.1	An annual herb inhabiting alkaline, mesic soils in vernal pools, playas, valley grassland, and foothill grassland. Blooms April-August (450-1,640 feet).	A	**Presumed Absent:** The Project area contains alkaline soils, but lacks vernal pools and flat grassland habitat. There is one nearby CNDDB occurrence of the species, approximately 8.33 miles northeast of the Project area (2015). Due to the lack of suitable habitat, the species is presumed absent.
San Miguel savory	*Clinopodium chandleri*	Fed: State: CNPS:	-- -- 1B.2	A perennial shrub inhabiting rocky, gabbroic, or metavolcanic soils of chaparral, cismontane woodland, coastal scrub, riparian woodland, valley grassland, and grassland communities. Flowers March-July (400-3,600 feet).	A	**Presumed Absent:** All nearby CNDDB occurrences of the species are concentrated near the Santa Rosa Plateau, beginning approximately 8.25 miles southwest of the Project area (2013). Additionally, the Project area lacks rocky, gabbroic, and metavolcanic soils. Due to the lack of suitable soils and the pattern of occurrences, the species is presumed

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						absent from the Project area.
Santa Lucia dwarf rush	*Juncus luciensis*	Fed: State: CNPS:	-- -- 1B.2	An annual grasslike herb inhabiting sandy soils of seeps, meadows, vernal pools, streams, and roadsides. Flowers April-August (980-6,200 feet).	A	**Presumed Absent:** The Project area does not contain many sandy soils and lacks vernal pool habitat, despite the presence of streams. Additionally, there is one nearby CNDDB occurrence of the species, on the Santa Rosa Plateau, approximately 8.21 miles southwest of the Project area (1975). Due to the lack of suitable habitat and the species' pattern of appearance, it is presumed absent.
Santa Rosa Basalt brodiaea	*Brodiaea santarosae*	Fed: State: CNPS:	-- -- 1B.2	A perennial herb native to California, inhabiting soils derived from Santa Rosa basalt in grassland communities. Flowers May-June (1,900-3,400 feet).	A	**Presumed Absent:** The Project area lacks the specific soils preferred by the species. The Project area is also located approximately 500 feet below the species' elevation range. Additionally, all nearby CNDDB occurrences of the species are concentrated on the Santa Rosa Plateau, approximately 8.93 miles southwest of the Project area (1979). Due to the lack of suitable soils and the distance of the Project area from the species' pattern of previous occurrences, the species is presumed absent.
Slender-horned spineflower	*Dodecahema leptoceras*	Fed: State: CNPS:	E E 1B.1	An annual herb inhabiting alluvial sand in coastal scrub, chaparral, and cismontane woodland communities. Flowers April-June (660-2,500 feet).	A	**Presumed Absent:** The Project area lacks coastal scrub and chaparral communities. In addition, there are no recent, nearby CNDDB occurrences. Due to the lack of occurrences and habitat, the species is presumed absent.
Smooth tarplant	*Centromadia pungens ssp. laevis*	Fed: State: CNPS:	-- -- 1B.1	An annual herb inhabiting alkaline soils of open, chenopod scrub, meadows and seeps, playas, riparian woodland, valley grassland, and foothill grassland communities. Flowers April-September (0-2,100 feet).	HP	**High Potential:** The Project area contains alkaline soils and riparian habitat. The nearest CNDDB occurrence of the species is approximately 0.43 miles southwest of the Project area (2011), and the species

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						was observed within the vicinity of the Project area by POWER Engineers biologists on June 9, 2020. Due to the presence of suitable habitat as well as the positive detection of this species during biological surveys, the species has a high potential to occur.
Southern mountains skullcap	*Scutellaria bolanderi ssp. austromontana*	Fed: State: CNPS:	-- -- 1B.2	A perennial rhizomatous herb inhabiting mesic soils of chaparral, cismontane woodland, and lower montane coniferous forest communities. Flowers June-August (1,400-6,500 feet).	A	**Presumed Absent:** There is one nearby CNDDB occurrence of the species, approximately 8.87 miles southwest of the Project area (1989). Additionally, the Project area lacks chaparral and cismontane/montane habitats. Due to the lack of suitable habitat and the lack of recent, nearby occurrences, the species is presumed absent.
Spreading navarretia	*Navarretia fossalis*	Fed: State: CNPS:	T -- 1B.1	An annual herb inhabiting vernal pools, chenopod scrub, playas, and shallow freshwater marsh and swamp communities. Flowers April-June (100-4,300 feet).	HP	**Presumed Absent:** The Project area contains shallow alkali marsh but lacks suitable freshwater habitat. The nearest CNDDB occurrence of the species is approximately 3.6 miles west of the Project area (2008). Due to the absence of potentially suitable habitat, the species is presumed to be absent from the Project area.
Thread-leaved brodiaea	*Brodiaea filifolia*	Fed: State: CNPS:	T E 1B.1	A perennial bulbiferous herb inhabiting clay soils within grassland, vernal pools, chaparral openings, cismontane woodland, coastal scrub, playas, valley grassland, and foothill grassland communities. Flowers March-June (80-4,000 feet).	A	**Presumed Absent:** The Project area contains clay soils, but lacks vernal pools, chaparral, grassland, and coastal scrub. The nearest CNDDB occurrence of the species is approximately 8.45 miles northeast of the Project area (2006). Due to the lack of suitable vegetation communities and with no nearby occurrences, the species is presumed absent.

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Vernal barley	*Hordeum intercedens*	Fed: State: CNPS:	-- -- 3.2	An annual grass native to California and Baja California, inhabiting saline flats and depressions in foothill grassland, valley grassland, coastal dune, coastal scrub, vernal pool, freshwater wetland, and wetland-riparian habitats. Flowers March-June (15-3,300 feet).	HP	**Presumed Absent:** There is a recent (2006) CNDDB occurrence of this species located 1.5 miles southwest from the Project area, within the same hydrologic system. However, the Project area does not contain suitable salt flats or depressions for this species to propagate, despite the presence of wetland-riparian habitat. Due to the lack of potentially suitable habitat features, the species is presumed to be absent.
White rabbit-tobacco	*Pseudognaphalium leucocephalum*	Fed: State: CNPS:	-- -- 2B.2	A perennial herb inhabiting dry, sandy creek bottoms of chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. Flowers July-December (0-6,900 feet).	HP	**Low to Moderate Potential:** The Project area contains riparian communities and sections of the drainage channel are dried out. There is one nearby CNDDB occurrence of the species, approximately 8.01 miles southwest of the Project area (1995). Due to the presence of some suitable habitat, the species has a low to moderate potential to occur.
Wiggins' cryptantha	*Cryptantha wigginsii*	Fed: State: CNPS:	-- -- 1B.2	An annual herb inhabiting clay soil in coastal scrub habitat. Flowers February-June (65-900 feet).	A	**Presumed Absent:** While the Project area contains clay soil, it lacks coastal scrub habitat. There is one nearby CNDDB occurrence of the species, approximately 2.88 miles southwest of the Project area (2012). However, the Project area is located approximately 400 feet above the species' elevation range. Due to the lack of suitable habitat and the elevation of the Project area, the species is presumed absent.
Woven-spored lichen	*Texosporium sancti-jacobi*	Fed: State: CNPS:	-- -- 3	A crustose lichen native to California, inhabiting basalt, granite, and mixed non-calcareous alluvium substrates in chaparral	HP	**Low to Moderate Potential:** The Project area contains granite alluvium soil substrate. In addition, a southern California

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
				openings, arid to semi-arid grasslands, shrublands, and savannas. The species is associated with *Poa sandbergii*, *Agropyron spicatum*, *Sitanion hystrix*, and *Stipa sp*. in northern California, and *Adenostoma fasciculatum*, *Festuca octoflora*, *Bromus rubens*, *Eriogonum fasciculatum*, and *Pinus sabiniana* in southern California (200-2,200 feet).		associated species, *E. fasciculatum*, was observed within the Project area during the July 24, 2019 general biological survey. Additionally, there is one nearby CNDDB occurrence of the species, approximately 5.37 miles southeast of the Project area (1998). Due to the presence of an associated species but the distance and time since the last nearby occurrence, the species has a low to moderate potential to occur.
Yucaipa onion	*Allium marvinii*	Fed: State: CNPS:	-- -- 3	A perennial bulbiferous herb inhabiting dry slopes and ridges in clay openings of chaparral communities. Known only from the Yucaipa and Beaumont area of the southern SBD Mountains. Flowers April-May (2,500-3,500 feet).	A	**Presumed Absent:** The Project area lacks dry chaparral communities that this species grows in and is not located within the species' elevational range; additionally, the Project area is not located within the Yucaipa or Beaumont area of the Southern San Bernardino Mountains. Due to the absence of habitat, this species is presumed absent from the Project area.

Federal Designations (Fed):
(FESA, USFWS)
E: Federally listed, endangered
T: Federally listed, threatened
DL: Federally listed, delisted

State Designations (CA):
(CESA, CDFW)
E: State-listed, endangered
T: State-listed, threatened

Other Designations
CDFW_SSC: CDFW Species of Special Concern
CDFW_FP: CDFW Fully Protected

California Native Plant Society (CNPS) Designations:
Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.
1A: Plants presumed extinct in California.
1B: Plants rare and endangered in California and throughout their range.
2: Plants rare, threatened, or endangered in California but more common elsewhere in their range.
3: Plants about which need more information; a review list.

Plants 1B, 2, and 4 extension meanings:
_**.1 Seriously** endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
_**.2 Fairly** endangered in California (20-80% occurrences threatened)
_**.3** Not very endangered in California (<20% of occurrences threatened or no current threats known)

Habitat Potential Absent [A] - No habitat present and no further work needed. Habitat Present [HP] - Habitat is or may be present. The species may be present. Critical Habitat [CH] – Project is within designated Critical Habitat.
Potential for Occurrence Criteria: **Present**: Species was observed on site during a site visit or focused survey. **High**: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. **Low-Moderate**: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. **Presumed Absent**: Focused surveys were conducted, and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.
Source: (CDFW 2019), (CNPS 2021), (CalFlora 2021), (Jepson 2021), (USFWS 2019).

CHAPTER 5. BIOLOGICAL RESOURCES, IMPACTS, AND RECOMMENDATIONS

The standard Best Management Practices (BMPs) described in Volume 1, Appendix C of the MSHCP will be implemented throughout the Project in order to maintain consistency with the MSHCP. These measures have been incorporated into the Project, along with additional measures developed specifically for the Project, to reduce project impacts to biological resources. Refer to Chapter 2.4 for a complete list of avoidance and minimization measures.

5.1 Habitats and Natural Communities of Special Concern

Within the Project area, alkali salt marsh, emergent wetland, and willow scrub riparian habitat are identified as natural communities of special concern and are discussed in this section. The impacts to these natural communities are included in Table 4. The majority of impacts will occur to non-conservation easement land; however, approximately 0.179 acres of temporary impacts to conservation easement land are anticipated. There will be no permanent impacts to conserved lands. Avoidance, minimization, and mitigation measures for these habitats are also discussed in detail in this section.

Table 4. Impacts to Sensitive Natural Habitats

Impact Type	Conserved Land	Impact to Riparian/Riverine Resource (acres)			Total
		Emergent Wetland	Willow Scrub Riparian	Alkali Salt Marsh	
Temporary	No	0.127	0.192	0.032	0.351
	Yes	0.050[1]	0.094[2]	0.035[2]	0.179
Total Temporary Impacts:		*0.177*	*0.286*	*0.067*	*0.530*
Permanent	No	0.007	0.029	0.009	0.045
Shade	No	0.152	0.077	0.091	0.320
Grand Total:		0.336	0.392	0.167	0.895

[1]*Ryland Conservation Easement*
[2]*Bellacap Conservation Easement*

5.1.1 Alkali Salt Marsh

Alkali salt marshes are isolated to dry, arid areas where alkaline soils and intense evaporation concentrate salt levels within the soils (CDFW 1988). This habitat type becomes seasonally flooded and can support a large population of plant assemblages that are xerophytic and halophytic. Alkali marshes often house a variety of migratory birds and other wildlife species. Vegetation and inundation are associated with local weather patterns and seasonal runoff (OSU 2014).

Survey Results for Alkali Salt Marsh

Alkali salt marsh habitat was identified within French Valley Creek during the July 24, 2019 biological surveys conducted by Dokken biologists and confirmed during the 2020 POWER Engineers biological surveys. The Project area contains approximately 0.167 acres of alkali marsh habitat. Dominant vegetation identified within this habitat type included big saltbush, broad-leaved pepperweed, mulefat, telegraph weed, and alkali heliotrope.

Project Impacts to Alkali Salt Marsh

Geotechnical investigations for the Project, which would occur prior to bridge construction, are anticipated to have temporary impacts to approximately 0.076 acres of alkali salt marsh habitat (Figure 6. Geotechnical Survey Impacts); however, these impacts are located entirely within the temporary and shade impact areas for the Project and will be mitigated as part of the proposed bridge project mitigation as indicated in Table 5. No additional compensatory mitigation for geotechnical investigation is proposed.

The Project is anticipated to have approximately 0.067 acres of temporary impacts to alkali salt marsh to allow for construction equipment access, approximately 0.009 acres of permanent impacts due to the installation of the pedestrian bridge piers, and approximately 0.091 acres of shade impacts associated with the installation of the proposed bridge (Table 4; Figure 5. Project Impacts).).

Avoidance, Minimization, and Mitigation for Alkali Salt Marsh

Due to the Project's proposed impacts to sensitive natural communities and the absence of local mitigation programs, the County will be implementing a permittee responsible mitigation project to mitigate for impacts to riverine/riparian resources, including 0.067 acres of on-site re-establishment of all temporarily impacted alkali salt marsh habitat and 0.335 acres of establishing alkali salt marsh habitat at a nearby off-site location. Mitigation details are included in Chapter 5.8.

Additionally, the avoidance and minimization measures BIO-1, BIO-9, BIO-16, BIO-18, BIO-19, and BIO-22 will be incorporated into the Project to avoid and minimize potential impacts to alkali salt marsh habitat within the Project area. For a complete list of measures, refer to Chapter 2.4.

BIO-1: BMPs will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):

- Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
- All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
- All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
- Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;
- All erosion control measures and storm water control measures would be properly maintained until the site has returned to a pre-construction state;
- All construction materials would be hauled off-site after completion of construction;

- Upon completion of construction activities, any temporary barriers to surface water flow must be removed in a manner that would allow flow to resume with the least disturbance to the substrate.

BIO-9: A qualified biologist will be required to conduct a training session for project personnel prior to construction. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.

BIO-16: Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, USFWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

BIO-18: The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.

BIO-19: The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.

BIO-22: Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

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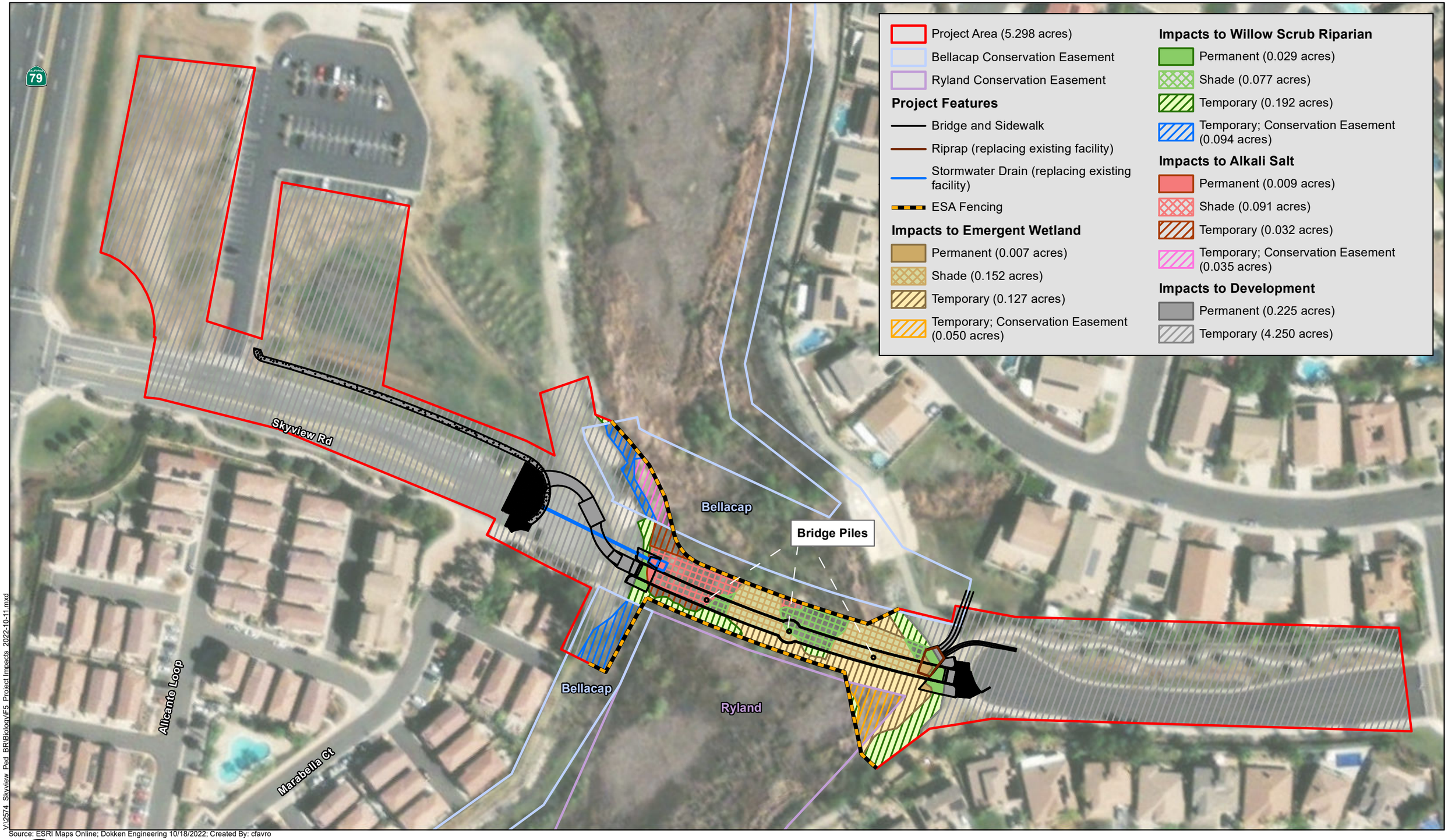

V:\2574_Skyview_Ped_BR\Biology\F5_Project Impacts_2022-10-11.mxd

Source: ESRI Maps Online; Dokken Engineering 10/18/2022; Created By: cfavro

1 inch = 100 feet

0 100 200 300 400 500 Feet

Figure 5
Project Impacts
Skyview Road Pedestrian Bridge Project
Winchester, Riverside County, California

V:\2574_Skyview_Ped_BR\Biology\F6_Geotech Survey Impacts_2022-10-18.mxd

Source: ESRI Maps Online; Dokken Engineering 10/18/2022; Created By: cfavro

1 inch = 50 feet

0 50 100 150 200 250 Feet

Figure 6
Geotechnical Survey Impacts
Skyview Road Pedestrian Bridge Project
Winchester, Riverside County, California

5.1.2 Emergent Wetland

The Project area contains approximately 0.336 acres of emergent wetland localized within French Valley Creek. This habitat type is characterized by herbaceous hydrophytes that are usually perennial and present for most of the growing season (USFWS 2021). Additionally, emergent wetlands can be identified by the presence of hydric soils, hydrophytic vegetation, and wetland hydrology not typically found in upland areas. Wetlands are productive habitats, and their distinctive conditions warrant consideration as a vital part of a hydrologic system.

Survey Results for Emergent Wetland

Emergent wetland vegetation was identified within French Valley Creek during the July 16, 2020 wetland delineation survey conducted by POWER Engineers biologists. Wetland delineations were conducted in accordance with technical methods outlined in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008), and *A Field Guide to the Identification of the OHWM in the Arid West Region of the Western United States* (Lichvar 2008).

Dominant vegetation within the emergent wetland includes cattail, mugwort, and willowherb. During the wetland delineation conducted on July 16, 2020, surface water was present in surface soil cracks within the stream channel (Appendix F. Wetland and Waterways Delineation Report).

Project Impacts to Emergent Wetland

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.063 acres of emergent wetland habitat (Figure 6). However, these impacts are located entirely within the temporary impact area and largely within the permanent shade impact area for the Project. Mitigation for temporary impacts associated with the geotechnical investigations will be compensated for with the Project mitigation as indicated in Table 5. No additional compensatory mitigation for geotechnical investigation is proposed.

The Project is anticipated to have approximately 0.177 acres of temporary impacts to emergent wetland habitat to allow for construction equipment access, approximately 0.007 acres of permanent impacts due to the installation of the pedestrian bridge piers, and approximately 0.152 acres of permanent shade impacts associated with the installation of the proposed bridge (Table 4; Figure 5).

Avoidance, Minimization and Mitigation for Emergent Wetland

The County is proposing to complete on-site re-establishment of all temporarily impacted emergent wetlands and establishing/creating emergent wetland habitat at a nearby off-site location (approximately 0.177 acres on-site and 0.527 acres off-site, see Chapter 5.8 for a description of mitigation efforts). In order to mitigate for permanent impacts to WOS and WOUS, the County proposes payment of an in-lieu fee (ILF) or purchase of credit for 0.048 acres of WOS and WOUS to compensate for impacts.

Additionally, the avoidance and minimization measures BIO-1, BIO-9, BIO-16, BIO-18, BIO-19, and BIO-22 will be incorporated into the Project design and Project construction in order to avoid and minimize potential impacts to emergent wetland habitat within the Project area.

5.1.3 Willow Scrub Riparian

Willow scrub riparian habitat is a vegetation community dominated by dense stands of shrubby willows and other shrublike trees that can be found near permanent sources of water or sub-irrigated areas. The transition between the riparian zone and the surrounding arid, desert habitat is often abrupt. Species within this vegetation community include arroyo willow, Goodding's willow (*Salix goodingii*), tamarisk, and mulefat, although composition may vary with local species. This habitat type serves an important role in housing local wildlife populations in desert climates (Holly 2011).

Survey Results for Willow Scrub Riparian

Willow scrub riparian habitat was identified within French Valley Creek during the July 24, 2019 biological survey conducted by Dokken biologists and confirmed during the 2020 POWER Engineers biological survey. The Project area contains approximately 0.328 acres of willow scrub riparian habitat. Vegetation identified within this habitat type included arroyo willow, silver wattle, tamarisk, and mulefat.

Project Impacts to Willow Scrub Riparian

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.055 acres of willow scrub riparian habitat (Figure 6). However, these impacts are located entirely within the temporary impact area and largely within the permanent shade impact area for the Project. Mitigation for temporary impacts associated with the geotechnical investigations will be compensated for with the Project mitigation as indicated in Table 5; as such, no additional compensatory mitigation for geotechnical investigation is proposed.

The Project is anticipated to have approximately 0.286 acres of temporary impacts to willow scrub riparian habitat to allow for construction equipment access. Approximately 0.077 acres of permanent shade impacts to willow scrub riparian habitat are anticipated following the installation of the proposed bridge. Due to improvements to the existing storm drain facilities located on the ends of the channel, there will be approximately 0.029 acres of permanent impacts to willow riparian scrub (Table 4; Figure 5).

Avoidance, Minimization, and Mitigation for Willow Scrub Riparian

Due to the Project's proposed impacts to sensitive natural communities and the absence of local mitigation programs, the County will be implementing a permittee responsible mitigation project to mitigate for impacts to riverine/riparian resources, including 0.286 acres of on-site re-establishment of all temporarily impacts willow riparian scrub and 0.412 acres of establishing/creating willow scrub riparian habitat at a nearby off-site location. Mitigation details are included in Chapter 5.8.

Additionally, the avoidance and minimization measures BIO-1, BIO-9, BIO-16, BIO-18, BIO-19, and BIO-22 will be incorporated into the Project design and Project construction in order to avoid and minimize potential impacts to willow scrub riparian habitat within the Project area. For a complete list of measures, refer to Chapter 2.4.

5.2 Threatened and Endangered Wildlife Species

5.2.1 Least Bell's Vireo

LBV is a federally and state listed endangered species and a covered species within the MSHCP. In 1994, critical habitat was designated for this species; however, no designated critical habitat for this species is located within the proposed Project area. LBV can be found in the California counties of Inyo, Santa Barbara, Ventura, Riverside, Orange, San Bernardino, and San Diego. In San Diego County, the Santa Margarita River supports nearly half of the U.S. population. LBV migrate from the species wintering grounds in southern Baja California, Mexico to breeding grounds between mid-March and early April, where they remain until late September (USFWS 2022).

LBV occurs in riparian habitats and typically breeds in willow riparian woodland supporting a dense, shrubby understory of mulefat and other mesic species. The species breeds in a few scattered areas of riparian habitat in southern California, primarily along the coast and the western edge of the Mojave Desert. The species requires dense riparian shrubbery, such as willow and wild rose, for nest construction and prefers to nest where flowing water is present. The decline of the species is attributed to land development, water diversion, recreational activities, and excessive grazing continue to impact the remaining riparian systems that support LBV. As a result, the birds are forced into marginal nesting areas, where they are more vulnerable to parasitism by the brown-headed cowbird.

Survey Results for Least Bell's Vireo

During habitat assessments and protocol-level surveys conducted in the spring and summer of 2020, Busby Biological Services identified the willow scrub riparian and emergent wetland habitats as suitable LBV habitat types within the Project area. No breeding LBV were detected during the 2020 focused, protocol-level surveys. However, a single LBV was detected during the eighth survey conducted on July 13, 2020. The LBV was detected within the 500-foot buffer area north of the proposed Project area. The individual, which appeared to be an adult, was observed foraging and singing sporadically for approximately 25 minutes. A follow-up visit to the site was conducted on July 22, 2020, to further investigate the LBV detected on July 13, 2020; however, LBV was not detected during this survey. It is likely that this individual was only using the survey area as foraging habitat. No other LBV were detected in the survey area at any other time during surveys (Appendix G).

Willow scrub riparian habitat located within the Project area is identified as potential nesting and/or foraging habitat for LBV; additionally, emergent wetland habitat serves as potential foraging habitat for this species. The Project area contains approximately 0.664 acres of potentially suitable habitat for LBV. Due to the presence of potentially suitable habitat and with a local observation of this species near the Project site, this species has a high potential to occur within the Project area.

Project Impacts to Least Bell's Vireo

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.118 acres of LBV habitat (Figure 6). However, these impacts are located entirely within the temporary impact areas and permanent shade impacts for the Project and will be fully mitigated by the Project mitigation. No additional compensatory mitigation for the geotechnical investigation is proposed.

Project impacts to potential LBV habitat will include approximately 0.007 acres of permanent impacts to emergent wetland foraging habitat via the installation of the pedestrian bridge piers and approximately 0.029 acres of permanent impacts to willow scrub riparian nesting/foraging habitat due to improvements to existing drainage features. An additional 0.152 acres of permanent shade impacts to emergent wetland (foraging) habitat and 0.077 acres of shade impacts to willow scrub riparian (nesting/foraging) habitat are anticipated following the installation of the proposed bridge. There will be approximately 0.177 acres of temporary impacts to emergent wetland (foraging) and 0.286 acres of temporary impacts to willow scrub riparian (nesting/foraging) habitat to allow construction equipment access to within the channel (Table 4; Figure 5).

Avoidance, Minimization, and Mitigation for Least Bell's Vireo

Mitigation for impacts to LBV habitat will be achieved via a comprehensive on and off-site mitigation effort, described in Chapter 5.8.

Additionally, species-specific avoidance and minimization measures BIO-2 and BIO-3 have been incorporated to avoid potential impacts to LBV. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

BIO-2: If any wildlife is encountered during the course of construction, said wildlife will be allowed to leave the construction area unharmed. If a special status species is encountered on the Project site, work will halt until said species is outside of the Project area. Any special status species occurrences during construction will be reported to the appropriate resource agency.

BIO-3: Removal of riparian vegetation will occur prior to construction and between October 1 and February 28 to avoid least Bell's vireo breeding season, as well as the general breeding season for other nesting birds. If vegetation removal is desired to occur during the breeding season, a qualified biologist(s) will conduct a pre-construction survey for least Bell's vireo and other migratory bird species within three days of the start of construction during the least Bell's vireo breeding season (March 1 through September 30). If active least Bell's vireo nests are identified within the Project Area or within 300 feet of the Proposed Project Area, no willow scrub or other riparian trees or shrubs will be removed until after the end of the least Bell's vireo breeding season (September 30). If active nests of other migratory birds are identified within the Project Area or within 300 feet of the Proposed Project Area, no willow scrub or other riparian trees or shrubs will be removed until after the end of the general nesting season (June 30).

5.2.2 Southwestern Willow Flycatcher

SWFL is federally endangered and is a covered species under the MSHCP. This species is a migratory passerine that breeds in the southwestern United States and winters in Mexico, Central America, and potentially in northern areas of South America (Sogge, et. al. 1997). The SWFL is one of four subspecies found in North America and is difficult to distinguish from the other subspecies except for its distinct "fitz-bew" song. This subspecies of willow flycatcher is light gray in color with white wing bars and is

generally paler in overall color than its counterparts. Subtle differences between the southwestern subspecies and other subspecies exist in bill length, wing to tail ratio, and other morphological features.

SWFL breed in riparian habitats characterized by dense vegetation within close proximity to open water or saturated soil. Vegetation structure and size of the riparian stand, rather than vegetation species, is more indicative of flycatcher breeding habitat. SWFL are threatened mainly by breeding habitat loss, fragmentation, and modification due to recreational, urban, and agricultural development. Surface water diversion, grazing livestock, and invasion of exotic plant species within breeding habitats also contribute to habitat loss. Brood parasitism by brown headed cowbirds contributes to the widespread and significant loss of SWFL throughout the breeding habitats.

Survey Results for Southwestern Willow Flycatcher

During protocol-level surveys for SWFL conducted by permitted Busby Biological Services biologists on June 1, 2020, two willow flycatchers were detected responding to a call playback. The willow flycatcher sightings occurred early in the second survey window, the time of year when SWFL are establishing breeding territories but also the time of year when subspecies *E.t. brewsterii* or *E.t. edastus* may still be present and singing while migrating through southern California (Sogge 2010). Because no willow flycatchers were detected during the subsequent three surveys, the two flycatchers detected during the second survey were likely one of the other migrant willow flycatcher subspecies and not breeding SWFL. No other willow flycatchers were detected within or adjacent to the survey area during the 2020 focused, protocol-level presence/absence surveys (Appendix G).

However, suitable SWFL habitat was identified as the willow scrub riparian and emergent wetland habitats within the Project area. Due to the presence of suitable habitat and potential occurrences of the species, it is presumed to have a high potential of occurring within the Project area.

Project Impacts to Southwestern Willow Flycatcher

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.118 acres of SWFL habitat (Figure 6). However, these impacts are located entirely within the temporary impact areas and largely within the permanent shade impact areas for the Project. Mitigation for temporary impacts associated with the geotechnical investigations will be adequately compensated for with the proposed bridge project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

Project impacts to SWFL habitat will include approximately 0.007 acres of permanent impacts to emergent wetland foraging habitat via the installation of the pedestrian bridge piers and approximately 0.029 acres of permanent impacts to willow scrub riparian nesting/foraging habitat due to improvements to existing drainage features. An additional 0.152 acres of permanent shade impacts to emergent wetland (foraging) habitat and 0.077 acres of shade impacts to willow scrub riparian (nesting/foraging) habitat are anticipated following the installation of the proposed bridge. There will be approximately 0.177 acres of temporary impacts to emergent wetland (foraging) and 0.286 acres of temporary impacts to willow scrub riparian (nesting/foraging) habitat to allow construction equipment access to within the channel (Table 4; Figure 5).

Avoidance, Minimization, and Mitigation for Southwestern Willow Flycatcher

Mitigation for impacts to SWFL habitat will be achieved via a comprehensive on and off-site mitigation effort, described in Chapter 5.8. Additionally, species-specific avoidance and minimization measures BIO-2 and BIO-3 have been incorporated to avoid potential impacts to SWFL. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

5.2.3 Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) is state listed as threatened, is identified by the CDFW as a SSC, and is a covered species under the MSHCP. This blackbird is prevalent throughout the Central Valley as well as in coastal communities and finds its home in thickets of willow, blackberry, and tall herbs. The tricolored blackbird feeds on insects, spiders, seeds, and grains, and its foraging habitat include grassland and cropland habitats. This species locates its nest near fresh water, especially by emerging wetland habitats, and are known to fly up to 4 miles to foraging habitat. Individuals are highly gregarious, and nesting areas often support a minimum of 50 bird pairs. Due to colony density, colonies are vulnerable to significant predation as well as habitat loss.

Survey Results for Tricolored Blackbird

The Project area contains a marshy riverbed with dense stands of cattail and pockets of open water occur approximately 0.4 miles southwest of the Project area. Additionally, the only local CNDDB occurrence of this species is within French Valley Creek, approximately 0.23 miles southwest of the Project area (2015). Due to the presence of suitable cattail stand nesting habitat and recent, nearby occurrences along the same riverbed that goes through the Project area, the species has a high potential to occur.

Project Impacts to Tricolored Blackbird

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.139 acres of riparian/riverine habitat types that are potentially suitable for tricolored blackbird (Figure 6). However, these impacts are located entirely within the temporary and shade impact areas for the pedestrian bridge proposed by the Project. Mitigation for temporary impacts associated with the geotechnical investigations will be adequately compensated for with the proposed Project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

Project impacts to potentially suitable tricolored blackbird habitat will include permanent impacts of approximately 0.009 acres of alkali salt marsh, 0.007 acres of emergent wetland, and 0.029 acres of willow scrub riparian habitat. In addition, the Project will have shade impacts to 0.091 acres of alkali salt marsh, 0.152 acres of emergent wetland, and 0.077 acres of willow riparian scrub. Temporary Project impacts are anticipated to occur to approximately 0.067 acres of alkali salt marsh, 0.177 acres of emergent wetland, and 0.286 acres of willow scrub riparian (Table 4; Figure 5).

Avoidance, Minimization, and Mitigation for Tricolored Blackbird

Mitigation for impacts to tricolored blackbird habitat will be achieved via a comprehensive on and off-site mitigation effort, described in Chapter 5.8. Additionally, species-specific avoidance and minimization measures BIO-2 and BIO-3 have been incorporated to avoid potential impacts to

tricolored blackbird. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

5.3 Special Status Wildlife Species

Prior to field surveys, a list of regional special-status wildlife species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the Project area was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the Project area. After a careful comparison between habitat requirements and the habitat available within the Project area, 4 special status wildlife species were determined to have potential to occur within the Project area. Each species with potential to occur within the Project area is discussed in more detail below.

5.3.1 Coast Horned Lizard

The coast horned lizard (*Phrynosoma blainvillii*) is not a Federally or State listed species but is a CDFW SSC. It is not a covered species under the MSHCP. These lizards are historically found in California along the Pacific coast from the Baja California border west of the deserts and the Sierra Nevada, north to the Bay Area, and inland as far north as Shasta Reservoir, and south into Baja California; however, their range has now been severely fragmented due to land alteration. The species inhabits open areas of sandy soil and low vegetation in riparian habitats, valleys, foothills, grasslands, woodlands, and semiarid mountains. They are often found in lowlands along sandy washes with scattered shrubs and along dirt roads, and frequently found near ant hills. The species is most active April through July with breeding occurring April to May and hatchlings emerging August to September. The coast horned lizard is diurnal, displaying active periods during warm weather, and retreating underground, becoming inactive during extended periods of low temperatures or extreme heat.

Populations of coast horned lizards are threatened and eliminated from many areas in Riverside County due to habitat destruction from human development and agriculture, and the spread of nonnative ants, such as Argentine ants (*Ridomyrmex humilis*) which displace the native ant food source (Stebbins 2003). Before commercial collecting was banned in 1981, this lizard was extensively exploited by the pet trade and the curio trade.

Survey Results for Coast Horned Lizard

The Project area does not contain loose, sandy soils suitable for this species; however, riparian habitat is present. Additionally, the nearest recent (2003) CNDDB occurrence of this species is located approximately 1.7 miles southwest of the Project area. Due to the presence of some suitable habitat features as well as the recent local occurrence of this species, coast horned lizards are presumed to have a low to moderate potential to occur within the Project area.

Project Impacts to Coast Horned Lizard

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.055 acres of willow scrub riparian habitat (Figure 6). However, these impacts are located entirely within the temporary and shade impact areas for the pedestrian bridge proposed by the Project. Mitigation for temporary impacts associated with the geotechnical investigations will be adequately compensated

for with the proposed Project mitigation; as such, no additional compensatory mitigation for geotechnical investigation is proposed.

The Project is anticipated to have 0.286 acres of temporary impacts, 0.029 acres of permanent impacts, and 0.077 acres of shade impacts to willow scrub riparian habitat within the Project area (Table 4; Figure 5). This stream channel contains riparian habitat that may serve as potentially suitable habitat for coast horned lizard; however, with the implementation of avoidance, minimization, and mitigation measures, the species would not be directly impacted.

Avoidance, Minimization, and Mitigation for Coast Horned Lizard

The avoidance and minimization measures BIO-4 and BIO-5 have been incorporated to avoid potential impacts to coast horned lizard. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

BIO-4: Plastic mono-filament netting (erosion control matting) or similar material that could trap coast horned lizards or other wildlife must not be used. Acceptable substitutes include jute, coconut coir matting or tackified hydroseeding compounds.

BIO-5: To avoid inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches greater than 6 inches deep must be covered at the end of the day or contain at least one escape ramp made of earth fill or wooden planks. All holes must be inspected by the Project biologist or on-site inspector at the beginning of each workday and before the holes and trenches are filled.

5.3.2 Ferruginous Hawk

The ferruginous hawk (*Buteo regalis)* is on the CDFW Watch List and a covered species under the MSHCP. This species inhabits open areas such as grasslands, sagebrush, saltbush-greasewood shrublands, and edges of pinyon-juniper forests. This species prefers to forage in grasslands with abundant small mammal populations. The species nests on lone trees, cliffs, utility structures, outcrops, boulders, shrubs, knolls, or haystacks, and if they do ground nest, it will be on a slope or hill crest.

Survey Results for Ferruginous Hawk

The nearest CNDDB occurrence of the species is approximately 3.64 miles south of the Project area (1989); however, the Project area lacks open grasslands and also lacks suitable nesting sites, as the trees within the Project area are not large enough and there are no boulders or rocky outcrops. Regardless, this species is known to forage and perch in parks, quiet neighborhoods, fields, backyard bird feeder, and streets with trees. The species could forage and perch within the Project area Therefore, the ferruginous hawk is presumed to have a low to moderate potential of occurring within the Project area.

Project Impacts to Ferruginous Hawk

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.194 acres of riparian/riverine habitat types that are potentially suitable for ferruginous hawk foraging and perching (Figure 6). However, these impacts are located entirely within the temporary and shade impact areas for the pedestrian bridge proposed by the Project. Mitigation for temporary impacts

associated with the geotechnical investigations will be adequately compensated for with the proposed Project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

Project impacts to potentially suitable ferruginous hawk foraging and perching habitat will include permanent impacts of approximately 0.009 acres of alkali salt marsh, 0.007 acres of emergent wetland, and 0.029 acres of willow riparian scrub. In addition, the Project will have shade impacts to 0.091 acres of alkali salt marsh, 0.152 acres of emergent wetland, and 0.077 acres of willow riparian scrub. Temporary Project impacts are anticipated to occur to approximately 0.067 acres of alkali salt marsh, 0.177 acres of emergent wetland, and 0.286 acres of willow scrub riparian (Table 4; Figure 5).

Avoidance, Minimization, and Mitigation for Ferruginous Hawk

The avoidance and minimization measures BIO-2 and BIO-3 have been incorporated to avoid potential impacts to ferruginous hawk. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

5.3.3 Yellow Warbler

The yellow warbler (*Dendroica petechia brewsteri*) is an SSC and a covered species under the MSHCP. This species inhabits riparian vegetation with close proximity to open water. Breeding grounds for this long distance migrant occur throughout the U.S. and Canada, while wintering habitats are found in Central and South America. Breeding occurs in the spring with female laying and incubating 3 to 6 eggs per clutch. Both the male and female participate in raising the young. Fledging occurs 9 to 12 days after hatching (NatureServe 2008). Breeding locations were once widespread throughout California except in the Mojave Desert. Yellow warblers were not widespread in the Mojave Desert and were known to reproduce in only a handful of locations throughout. Yellow warblers continue to inhabit many of the same areas in the Mojave they historically occupied, such as the Mojave River.

Threats to the yellow warbler include habitat degradation due to urbanization and agricultural development, nest brood parasitism by brown-headed cowbirds, and nest predation by other natural predators.

Survey Results for Yellow Warbler

There are no recent local CNDDB occurrences of this species within the vicinity of the Project area; however, riparian vegetation communities potentially suitable for this species is within the Project area. Therefore, the yellow warbler is presumed to have a low to moderate potential of occurring within the Project area.

Project Impacts to Yellow Warbler

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.194 acres of riparian/riverine habitat types that are potentially suitable for yellow warbler (Figure 6). However, these impacts are located entirely within the temporary and shade impact areas for the pedestrian bridge proposed by the Project. Mitigation for temporary impacts associated with the

geotechnical investigations will be adequately compensated for with the proposed Project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

Project impacts to potentially suitable yellow warbler habitat will include permanent impacts of approximately 0.009 acres of alkali salt marsh, 0.007 acres of emergent wetland, and 0.029 acres of willow riparian scrub. In addition, the Project will have shade impacts to 0.091 acres of alkali salt marsh, 0.152 acres of emergent wetland, and 0.077 acres of willow riparian scrub. Temporary Project impacts are anticipated to occur to approximately 0.067 acres of alkali salt marsh, 0.177 acres of emergent wetland, and 0.286 acres of willow scrub riparian (Table 4; Figure 5).

Avoidance, Minimization, and Mitigation for Yellow Warbler

The avoidance and minimization measures BIO-2 and BIO-3 have been incorporated to avoid potential impacts to yellow warbler. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

5.3.4 Western Pond Turtle

Western pond turtle is an SSC and a covered species under the MSHCP. The species is fully aquatic, inhabiting ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic vegetation. Suitable habitat includes woodland, forests, and grasslands. The species requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August.

Survey Results for Western Pond Turtle

The species was not observed within the Project area during biological surveys; however, the nearest CNDDB occurrence of the species is approximately 1.77 miles southwest of the Project area and Riverside County Parks trapping and radiotelemetry studies have documented the species approximately 0.5 miles west of the Project area. The Project area contains a flood drainage channel and associated riparian vegetation including cattails. The Project area lacks deep permanent water but sometimes contains open ponded water, which is potentially suitable habitat for the species. The species has a low potential to occur within the Project area based on the specific habitat conditions at the site.

Project Impacts to Western Pond Turtle

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.063 acres of emergent wetland habitat that is potentially suitable for western pond turtle (Figure 6). However, these impacts are located entirely within the temporary and shade impact areas for the pedestrian bridge proposed by the Project. Mitigation for temporary impacts associated with the geotechnical investigations will be adequately compensated for with the proposed Project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

Project impacts to potentially suitable western pond turtle habitat will include permanent impacts of approximately 0.007 acres of emergent wetland. In addition, the Project will have shade impacts to 0.152 acres of emergent wetland. Temporary Project impacts are anticipated to occur to approximately 0.177 acres of emergent wetland (Table 4; Figure 5).

Avoidance, Minimization, and Mitigation for Western Pond Turtle

The avoidance and minimization measure BIO-27 has been incorporated to avoid potential impacts to western pond turtle. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

BIO-27: A Western Pond Turtle Avoidance and Minimization Plan will be developed and implemented as part of the project to ensure further conservation of the species. This plan will include but is not limited to the installation of exclusionary fencing, contractor education, biological monitoring, relocation measures (relocation areas shall be preapproved by the California Department of Fish and Wildlife prior to construction), and pond turtle trapping if needed.

5.4 Special Status Plant Species

Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches. The potential for each species to occur within the Project area was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the Project area. After a careful comparison between habitat requirements and the habitat available within the Project area, four special status plants were determined to have potential to occur within the Project area. Each species with potential to occur within the Project area will be discussed below.

Survey Results for Special Status Plant Species

The biological survey conducted by Dokken biologists on July 24, 2019, identified that the Project area contains marshy riparian vegetation communities as well as alkaline soils; these habitat features provide potentially suitable habitat conditions for five special status plant species: Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*), smooth tarplant (*Centromadia pungens ssp. laevis*), spreading navarretia (***Navarretia fossalis)*** white rabbit-tobacco (*Pseudognaphalium leucocephalum*), and woven-spored lichen (*Texosporium sancti-jacobi*; CalFlora 2021). Coulter's goldfields, spreading navarretia, and smooth tarplant are Criteria Area species covered under the MSHCP. The biological survey conducted by POWER Engineers biologists on June 9, 2020 identified a population of approximately 25 individuals of smooth tarplant on the northwest side of the channel, just outside of the Project area. Additionally, Coulter's goldfields have a high potential of occurring due to the presence of suitable habitat and proximity to recent CNDDB occurrences of these species. Spreading navarretia was not identified within the Project area, and it was noted that habitat for this species is absent from the Project area as there is no suitable freshwater habitat; however, additional surveys will be conducted to confirm prior to construction.

White rabbit-tobacco has a low to moderate potential of occurring due to the presence of potentially suitable habitat, although there are no recent local occurrences of this species. Woven-spored lichen have a low to moderate potential of occurring within the Project area due to the presence of appropriate soil types as well as associated *E. fasciculatum* plant species. Both of these species are not covered under the MSHCP. No Narrow Endemic Plant species were observed or are anticipated to occur within the Project area.

Project Impacts to Special Status Plant Species

Preliminary geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.076 acres of alkali salt marsh habitat and 0.055 acres of willow scrub riparian habitat (Figure 6). However, these impacts are located entirely within the temporary impact and shade impact areas for the pedestrian bridge proposed by the Project. Mitigation for temporary impacts associated with the geotechnical investigations will be adequately compensated for with the proposed bridge project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

The Project is anticipated to temporarily impact approximately 0.067 acres of alkali salt marsh habitat and approximately 0.286 acres of willow scrub riparian habitat to allow construction equipment access to within the channel. Additionally, the Project is anticipated to permanently impact approximately 0.009 acres of alkali salt marsh habitat due to the installation of the pedestrian bridge piers and 0.029 acres of willow riparian scrub due to improvements to existing drainage facilities on the edge of the channel. The Project will also have shade impacts to approximately 0.091 acres of alkali salt marsh habitat and approximately 0.077 acres of willow scrub riparian habitat (Figure 5).

Avoidance, Minimization, and Mitigation for Special Status Plant Species

Mitigation for impacts to populations of special status plant species will be achieved via a comprehensive on and off-site mitigation effort, described in Chapter 5.8. Additionally, plant species-specific avoidance and minimization measures BIO-6 has been incorporated to avoid potential impacts to special status plant species. See Chapter 2.4 for a full list of avoidance and minimization measures to be incorporated into the Project.

BIO-6: Prior to construction-related activities, a protocol level botanical survey will be conducted by the Project biologist to detect if NEPSSA 4 plant species (San Diego ambrosia, spreading navarretia, and Wright's trichocoronis), local Criteria Area plants (smooth tarplant, Coulter's goldfields) and other special status plants (white rabbit-tobacco, woven-spored lichen) are present within the Project area. The survey will be conducted during the appropriate blooming season when special status plants are more likely to be encountered. If any special status plant species are discovered within the Project footprint prior to construction, the RCA shall be notified, and the County will determine if the population can be avoided.

5.5 Migratory Birds

Native migratory birds, protected under the MBTA and similar provisions under CFG code, have the potential to nest within the Project area. To avoid and minimize potential impacts to migratory birds, the following avoidance and minimization measure has been incorporated into the Project design.

With the inclusion of avoidance and minimization measure BIO-3, no impacts to migratory birds protected under the MBTA are anticipated.

5.6 Invasive Species

In February 1999, EO 13112 was signed, requiring Federal agencies to work on preventing and controlling the introduction and spread of invasive species. The following measures will be included in the Project plans to ensure that invasive species are not introduced or spread:

BIO-7: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-8: All hydroseed and plant mixes must not contain any species identified as being invasive by Cal-IPC.

5.7 Habitat Fragmentation and Wildlife Movement

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another, as in the fragmentation of habitats within and around "checkerboard" residential development. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grassland habitats.

The proposed Project is anticipated to have minimal permanent impacts to the existing landscape and is unlikely to fragment any local wildlife networks. The MSHCP identifies the Proposed Constrained Linkage 18 as passing through the Project area - Proposed Constrained Linkage 18 provides Live-In and Movement Habitat for common mammal species, such as bobcat. The pedestrian bridge is anticipated to provide clearance sufficient for large mammals such as mule deer to pass, and is not anticipated to disrupt any wildlife corridors that pass through the Project's area of impact. Additionally, to minimize the potential for habitat fragmentation, the proposed Project will be constructed with appropriate avoidance and minimization measures. The Project is therefore not anticipated to be a physical barrier to existing local wildlife migrations and is not anticipated to have a meaningful impact related to habitat fragmentation and regional wildlife movement.

5.8 Mitigation

Due to the Project's proposed impacts to sensitive natural communities and the absence of local mitigation programs, the County will be implementing a permittee responsible mitigation project to re-establish temporary impacts to willow scrub riparian, emergent wetland, and alkali salt marsh on-site, and establish willow scrub riparian, emergent wetland, and alkali salt marsh at a nearby off-site location (Figure 7. Proposed Mitigation Site). The on- and off-site mitigation efforts would provide compensation for 1.804 acres of riparian/riverine resources to satisfy MSHCP and CDFW mitigation requirements. In addition, to mitigate for permanent impacts to WOS and WOUS, the County proposes payment of an ILF or purchase of mitigation credits for 0.048 acres of WOS and WOUS, as indicated in Table 5 and Table 6.

Mitigation efforts are designed with the objective of providing benefits that are biologically equivalent or superior to that which would occur if effects to the riparian/riverine resources were avoided. Impacts to all riparian/riverine habitat (which includes alkali salt marsh, emergent wetland, and willow scrub riparian habitat) within the Project area will be mitigated as indicated in Table 5. Furthermore, mitigation efforts would focus on creating suitable LBV habitat, as the Project area contains suitable habitat for the species, and it is assumed present due to the results of protocol level surveys.

Table 5. Project Impacts and Mitigation

Riparian/Riverine Resource	Impact Type	Impact Area (acres)	Mitigation Ratio	Required Mitigation (acres)	Mitigation Location	Agency Jurisdiction
Emergent Wetland	Permanent	0.007	3:1	0.021	ILF/Mitigation Bank & Off-Site	USACE, RWQCB
	Shade	0.152	3:1	0.456	Off-Site	RCA, CDFW
	Temporary	0.127	1:1	0.127	On-Site	RCA, CDFW
	Temporary (Conserved Land)	0.050	2:1	0.100	On-Site (0.050 acres) & Off-Site (0.050 acres)	RCA, CDFW
	Total:	0.336	-	0.704	-	-
Willow Scrub Riparian	Permanent	0.029	3:1	0.087	Off-Site	RCA, CDFW
	Shade	0.077	3:1	0.231	Off-Site	RCA, CDFW
	Temporary	0.192	1:1	0.192	On-Site	RCA, CDFW
	Temporary (Conserved Land)	0.094	2:1	0.188	On-Site (0.094 acres) & Off-Site (0.094 acres)	RCA, CDFW
	Total:	0.392	-	0.698	-	-
Alkali Salt Marsh	Permanent	0.009	3:1	0.027	ILF/Mitigation Bank & Off-Site	USACE, RWQCB
	Shade	0.091	3:1	0.273	Off-Site	RCA, CDFW
	Temporary	0.032	1:1	0.032	On-Site	RCA, CDFW
	Temporary (Conserved Land)	0.035	2:1	0.070	On-Site (0.035 acres) & Off-Site (0.035 acres)	RCA, CDFW
	Total:	0.167	-	0.402	-	-
	Grand Total:	*0.895*	-	*1.804*	-	-

Table 5 and Table 6 outline the required mitigation for all riparian/riverine habitat resources within the Project area. Temporary impacts would be mitigated at a 1:1 ratio. Temporary impacts to conserved lands would be mitigated at a 2:1 ratio. Permanent and shade impacts would be mitigated for at a 3:1 ratio. The Project will require approximately 1.804 acres of mitigation.

The location of the off-site mitigation project is anticipated to be approximately 200 feet upstream of the proposed pedestrian bridge within French Valley Creek. The mitigation project would occur on APN 480-160-022, which is a parcel of land within the channel that is currently identified as an RCA MSHCP Conservation Easement (Figure 7). This stretch of the creek has been channelized during development

and construction of flood control levees, and currently is a narrow stream channel and a confined riparian area, unlike upstream and downstream, where riparian vegetation is broad and across the entire channel floor. Habitat mitigation activities, at a minimum, would consist of initial invasive and non-native species removal, seeding with a native seed palate, planting native cuttings and container plants, regular irrigation for three years during the plant establishment period, weeding maintenance, and 5-year biological monitoring and reporting. Habitat establishment activities would be focused on establishing a diverse, self-sustaining native plant community which provides balanced mitigation to offset the Project's anticipated impacts to alkali saltmarshes, emergent wetlands, and willow scrub. Further studies would be required prior to final mitigation design, including hydraulic and soil analysis. The results of these investigations would determine the details of the final mitigation plan; however, the County commits to provide mitigation for alkali salt marsh, emergent wetlands, and willow scrub in kind. Additional details regarding the proposed mitigation plan can be found in Chapter 3.3.1.2 of the Determination of Biologically Equivalent or Superior Preservation (DBESP) report.

In addition, the County would complete re-establishment of all temporary impact areas (approximately 0.530 acres) on-site as a part of the overall Project mitigation effort. The 0.530 acres of on-site mitigation would be composed of 0.286 acres of willow scrub riparian habitat, 0.177 acres of emergent wetland, and 0.067 acres of alkali salt marsh. On-site re-establishment would occur under the same principles of the off-site mitigation project, and include site preparation, seeding with a native seed palate, planting native cuttings and container plants, regular irrigation for three years during the plant establishment period, weeding maintenance, and 5-year biological monitoring and reporting. The Project area currently exhibits a high level of native species, and a comprehensive invasive species removal plan is not required. Due to the narrow area of impacts and the placement of the new bridge, adjacent willows would be protected in place and natural recruitment is expected to be high. On-site re-establishment activities would provide benefits to the temporarily impacted areas that are equivalent or superior to that which would occur if effects to the riparian/riverine resources in these areas were avoided.

Table 6. Proposed Mitigation and Habitat Types

Agency Jurisdiction	Mitigation Location	Riparian/Riverine Resource	Mitigation Type	Proposed Mitigation Area (acres)
USACE, RWQCB	ILF or Mitigation Bank	Emergent Wetland & Alkali Salt Marsh (WOUS)	-	0.048
			Total USACE/RWQCB Mitigation:	0.048
RCA, CDFW	On-Site	Emergent Wetland	Re-establishment	0.177
		Willow Scrub Riparian	Re-establishment	0.286
		Alkali Salt Marsh	Re-establishment	0.067
			Total:	0.530
	Off-Site	Emergent Wetland	Establishment/Creation	0.527
		Willow Scrub Riparian	Establishment/Creation	0.412
		Alkali Salt Marsh	Establishment/Creation	0.335
			Total:	1.274
			Total RCA/CDFW Mitigation:	1.804

Mitigation efforts are designed with the objective of providing benefits that are biologically equivalent or superior to that which would occur if effects to the riparian/riverine resources were avoided. Impacts to all riparian/riverine habitat (which includes alkali salt marsh, emergent wetland, and willow scrub riparian habitat) within the Project area will be mitigated as indicated in Table 6. The Project will implement the mitigation efforts discussed above and included as mitigation measure BIO-28 below:

BIO-28: The County will be implementing a permittee responsible mitigation project to re-establish temporary impacts to willow scrub riparian, emergent wetland, and alkali salt marsh on-site, establish stream channel and willow scrub riparian habitat off-site, and enhance alkali salt marsh habitat at the nearby off-site location. The on- and off-site mitigation efforts would provide compensation for 1.804 acres of riparian/riverine resources to satisfy MSHCP and CDFW mitigation requirements. In addition, to mitigate for permanent impacts to WOS and Waters of the United States (WOUS), the County proposes payment of an ILF or purchase of mitigation credits for 0.048 acres of WOS and WOUS to compensate for impacts.

Project Area (5.298 acres)

Proposed Off-Site Mitigation

On-Site Habitat Re-establishment

Emergent Wetland (0.177 acres)

Willow Scrub Riparian (0.286 acres)

Alkali Salt Marsh (0.067 acres)

Invasive Species Removal

Broad-leafed pepperweed

Tamarisk and tree tobacco

Off-site mitigation activities will include the establishment/creation of a minimum of 0.527 acres of emergent wetland, 0.412 acres of willow scrub riparian, and 0.335 acres of alkali salt marsh habitat.

Skyview Rd

Alicante Loop

Marabella Ct

79

V:\2574_Skyview_Ped_BR\Biology\F7_Proposed Mitigation Site_2022-10-18.mxd

Source: ESRI Maps Online; Dokken Engineering 10/18/2022; Created By: cfavro

1 inch = 125 feet

0 125 250 375 500 625 Feet

Figure 7
Proposed Mitigation Site
Skyview Road Pedestrian Bridge Project
Winchester, Riverside County, California

5.9 Cumulative Impacts

According to Section 15130 of the CEQA Guidelines, cumulative impacts refer to incremental effects of an individual Project when viewed in connection with the effects of past Projects, current Projects, and probable future Projects. This Project is linking Skyview Road over French Valley Creek with a pedestrian bridge and is included in the Riverside County 2015 General Plan. Although the Project will have some incremental effects to the surrounding landscape, the cumulative effects of this Project and other current and future regional development covered by the MSHCP have been accounted for and mitigated by the establishment of a comprehensive reserve system.

Adjacent projects include the recent construction of the French Valley Library approximately 500 feet northwest of the Project area. Additionally, local residential communities have been under development since the early 2000's and have only recently been completed. These projects were included in the Riverside County 2015 General Plan and covered under the MSHCP.

Considering the mitigation for this Project through the MSHCP, and the measures proposed to avoid and minimize impacts to the biological resources, it is not expected that the Project would substantially contribute to cumulative effects to any protected species or their habitats. No additional cumulative impacts are anticipated. Additionally, the County will be implementing a permittee responsible mitigation project to re-establish temporary impacts and establish alkali salt marsh, emergent wetland, and willow scrub riparian habitat at an offsite location. The proposed location of the off-site mitigation project is approximately 200 feet upstream of the proposed bridge within the French Valley Creek floodplain. Details regarding the mitigation site proposal will be specified in the DBESP document that will be prepared by the County and approved by the RCA prior to Project development. With the implementation of this compensatory mitigation project, no cumulative loss of habitat is expected to result from the Skyview Road Pedestrian Bridge Project.

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USFWS 2022	Least Bell's Vireo. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office (Accessed 6/14/2022).
Zeiner et al. 1988	Zeiner 1988. D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. CDFG, Sacramento, California.

APPENDIX A – USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901

In Reply Refer To:
Project Code: 2023-0083159
Project Name: Skyview Bridge

May 18, 2023

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

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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

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

A biological assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a biological assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a biological assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found at the Fish and Wildlife Service's Endangered Species Consultation website at:

https://www.fws.gov/endangered/what-we-do/faq.html

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

PROJECT SUMMARY

Project Code: 2023-0083159
Project Name: Skyview Bridge
Project Type: Bridge - New Construction
Project Description: New pedestrian bridge project
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@33.60676975,-117.10693424014379,14z

Counties: Riverside County, California

ENDANGERED SPECIES ACT SPECIES

There is a total of 14 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

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

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

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

MAMMALS

NAME	STATUS
Stephens' Kangaroo Rat *Dipodomys stephensi (incl. D. cascus)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Threatened

BIRDS

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Quino Checkerspot Butterfly *Euphydryas editha quino (=E. e. wrighti)* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5900	Endangered

CRUSTACEANS

NAME	STATUS
Riverside Fairy Shrimp *Streptocephalus woottoni* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp *Branchinecta lynchi* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

FLOWERING PLANTS

NAME	STATUS
California Orcutt Grass *Orcuttia californica* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4923	Endangered
Munz's Onion *Allium munzii* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2951	Endangered
San Diego Ambrosia *Ambrosia pumila* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered
Spreading Navarretia *Navarretia fossalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened
Thread-leaved Brodiaea *Brodiaea filifolia* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6087	Threatened

CRITICAL HABITATS

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

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: County of Riverside
Name: Scott Salembier
Address: 110 Blue Ravine Road
City: Folsom
State: CA
Zip: 95630
Email ssalembier@dokkenengineering.com
Phone: 9168580642

LEAD AGENCY CONTACT INFORMATION

Lead Agency: County of Riverside

APPENDIX B – CNDDB Species List

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Romoland (3311762) OR Winchester (3311761) OR Hemet (3311668) OR Murrieta (3311752) OR Bachelor Mtn. (3311751) OR Sage (3311658))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Allium marvinii Yucaipa onion	PMLIL02330	None	None	G1	S1	1B.2
Allium munzii Munz's onion	PMLIL022Z0	Endangered	Threatened	G1	S1	1B.1
Almutaster pauciflorus alkali marsh aster	PDASTEL010	None	None	G4	S1S2	2B.2
Ambrosia pumila San Diego ambrosia	PDAST0C0M0	Endangered	None	G1	S1	1B.1
Anniella stebbinsi Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Arctostaphylos rainbowensis Rainbow manzanita	PDERI042T0	None	None	G2	S2	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Artemisiospiza belli belli Bell's sparrow	ABPBX97021	None	None	G5T2T3	S3	WL
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus pachypus var. jaegeri Jaeger's milk-vetch	PDFAB0F6G1	None	None	G4T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex coronata var. notatior San Jacinto Valley crownscale	PDCHE040C2	Endangered	None	G4T1	S1	1B.1
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta sandiegonensis San Diego fairy shrimp	ICBRA03060	Endangered	None	G2	S1	
Brodiaea filifolia thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
Brodiaea santarosae Santa Rosa Basalt brodiaea	PMLIL0C0G0	None	None	G1	S1	1B.2
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S4	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
Caulanthus simulans Payson's jewelflower	PDBRA0M0H0	None	None	G4	S4	4.2
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Chaetodipus californicus femoralis Dulzura pocket mouse	AMAFD05021	None	None	G5T3	S3	SSC
Chaetodipus fallax fallax northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	SSC
Chorizanthe parryi var. parryi Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
Chorizanthe polygonoides var. longispina long-spined spineflower	PDPGN040K1	None	None	G5T3	S3	1B.2
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Clinopodium chandleri San Miguel savory	PDLAM08030	None	None	G2G3	S2	1B.2
Coleonyx variegatus abbotti San Diego banded gecko	ARACD01031	None	None	G5T5	S1S2	SSC
Crotalus ruber red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Cryptantha wigginsii Wiggins' cryptantha	PDBOR0A400	None	None	G2	S1	1B.2
Deinandra mohavensis Mojave tarplant	PDAST4R0K0	None	Endangered	G3	S3	1B.3
Diadophis punctatus modestus San Bernardino ringneck snake	ARADB10015	None	None	G5T2T3	S2?	
Dipodomys merriami parvus San Bernardino kangaroo rat	AMAFD03143	Endangered	Candidate Endangered	G5T1	S1	SSC
Dipodomys stephensi Stephens' kangaroo rat	AMAFD03100	Threatened	Threatened	G2	S2	
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eryngium aristulatum var. parishii San Diego button-celery	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Euphydryas editha quino quino checkerspot butterfly	IILEPK405L	Endangered	None	G5T1T2	S1S2	
Gila orcuttii arroyo chub	AFCJB13120	None	None	G2	S2	SSC
Githopsis diffusa ssp. filicaulis Mission Canyon bluecup	PDCAM07023	None	None	G5T1Q	S1	3.1
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Harpagonella palmeri Palmer's grapplinghook	PDBOR0H010	None	None	G4	S3	4.2
Juncus luciensis Santa Lucia dwarf rush	PMJUN013J0	None	None	G3	S3	1B.2
Lanius ludovicianus loggerhead shrike	ABPBR01030	None	None	G4	S4	SSC
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G4G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Lepus californicus bennettii San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	
Linderiella occidentalis California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Linderiella santarosae Santa Rosa Plateau fairy shrimp	ICBRA06020	None	None	G1G2	S1	
Myosurus minimus ssp. apus little mousetail	PDRAN0H031	None	None	G5T2Q	S2	3.1
Navarretia fossalis spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Onychomys torridus ramona southern grasshopper mouse	AMAFF06022	None	None	G5T3	S3	SSC
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Penstemon californicus California beardtongue	PDSCR1L110	None	None	G3	S2	1B.2
Perognathus longimembris brevinasus Los Angeles pocket mouse	AMAFD01041	None	None	G5T2	S1S2	SSC
Perognathus longimembris internationalis Jacumba pocket mouse	AMAFD01044	None	None	G5T2T3	S2	SSC
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G4	S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Salvadora hexalepis virgultea coast patch-nosed snake	ARADB30033	None	None	G5T4	S3	SSC
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC
Socalchemmis icenoglei Icenogle's socalchemmis spider	ILARAU7020	None	None	G1	S1	
Southern Coast Live Oak Riparian Forest Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Cottonwood Willow Riparian Forest						
Southern Interior Basalt Flow Vernal Pool	CTT44310CA	None	None	G1	S1.2	
Southern Interior Basalt Flow Vernal Pool						
Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Sycamore Alder Riparian Woodland						
Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
Southern Willow Scrub						
Spea hammondii	AAABF02020	None	None	G2G3	S3S4	SSC
western spadefoot						
Sphaerocarpos drewiae	NBHEP35030	None	None	G1	S1	1B.1
bottle liverwort						
Streptocephalus woottoni	ICBRA07010	Endangered	None	G1G2	S2	
Riverside fairy shrimp						
Symphyotrichum defoliatum	PDASTE80C0	None	None	G2	S2	1B.2
San Bernardino aster						
Taricha torosa	AAAAF02032	None	None	G4	S4	SSC
Coast Range newt						
Texosporium sancti-jacobi	NLTEST7980	None	None	G3	S2	3
woven-spored lichen						
Thamnophis hammondii	ARADB36160	None	None	G4	S3S4	SSC
two-striped gartersnake						
Toxostoma bendirei	ABPBK06050	None	None	G4	S3	SSC
Bendire's thrasher						
Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
Valley Needlegrass Grassland						
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S3	
least Bell's vireo						

Record Count: 96

APPENDIX C – CNPS Species List

California Native Plant Society

Search Results

55 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3311762:3311761:3311668:3311752:3311658:3311751]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Abronia villosa var. *aurita*	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	None	None	G5T2?	S2	1B.1		2001-01-01	 © 2011 Aaron E. Sims
Allium marvinii	Yucaipa onion	Alliaceae	perennial bulbiferous herb	Apr-May	None	None	G1	S1	1B.2	Yes	2001-01-01	 © 2013 Keir Morse
Allium munzii	Munz's onion	Alliaceae	perennial bulbiferous herb	Mar-May	FE	CT	G1	S1	1B.1	Yes	1980-01-01	 © 2003 Guy Bruyea
Almutaster pauciflorus	alkali marsh aster	Asteraceae	perennial herb	Jun-Oct	None	None	G4	S1S2	2B.2		2017-03-14	 © 2014 Richard Spellenberg
Ambrosia pumila	San Diego ambrosia	Asteraceae	perennial rhizomatous herb	Apr-Oct	FE	None	G1	S1	1B.1		1974-01-01	 © 2010 Benjamin Smith
Amsinckia douglasiana	Douglas' fiddleneck	Boraginaceae	annual herb	Mar-May	None	None	G4	S4	4.2	Yes	2007-08-20	 © 2013 Chris Winchell
Arctostaphylos rainbowensis	Rainbow manzanita	Ericaceae	perennial evergreen shrub	Dec-Mar	None	None	G2	S2	1B.1	Yes	1994-01-01	No Photo Available
Astragalus pachypus var. *jaegeri*	Jaeger's milk-vetch	Fabaceae	perennial shrub	Dec-Jun	None	None	G4T1	S1	1B.1	Yes	1994-01-01	No Photo Available

Atriplex coronata var. *notatior*	San Jacinto Valley crownscale	Chenopodiaceae	annual herb	Apr-Aug	FE	None	G4T1	S1	1B.1	Yes	1988-01-01	 © 2008 Larry Sward
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	None	None	G1G2	S1	1B.1		1988-01-01	No Photo Available
Atriplex serenana var. *davidsonii*	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G5T1	S1	1B.2		1994-01-01	No Photo Available
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	FT	CE	G2	S2	1B.1	Yes	1974-01-01	 © 2016 Keir Morse
Brodiaea santarosae	Santa Rosa Basalt brodiaea	Themidaceae	perennial bulbiferous herb	May-Jun	None	None	G1	S1	1B.2	Yes	2008-02-05	 © 2021 W. Juergen Schrenk
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar-Jun	None	None	G3G4	S3S4	4.2	Yes	1974-01-01	No Photo Available
Calochortus plummerae	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	No Photo Available
Calochortus weedii var. *intermedius*	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G3G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
Caulanthus simulans	Payson's jewelflower	Brassicaceae	annual herb	(Feb)Mar-May(Jun)	None	None	G4	S4	4.2	Yes	1974-01-01	No Photo Available
Centromadia pungens ssp. *laevis*	smooth tarplant	Asteraceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.1	Yes	1994-01-01	No Photo Available
Chorizanthe leptotheca	Peninsular spineflower	Polygonaceae	annual herb	May-Aug	None	None	G3	S3	4.2		1994-01-01	No Photo Available
Chorizanthe parryi var. *parryi*	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	None	None	G3T2	S2	1B.1	Yes	1994-01-01	No Photo Available
Chorizanthe polygonoides var. *longispina*	long-spined spineflower	Polygonaceae	annual herb	Apr-Jul	None	None	G5T3	S3	1B.2		1994-01-01	No Photo Available
Clinopodium chandleri	San Miguel savory	Lamiaceae	perennial shrub	Mar-Jul	None	None	G2G3	S2	1B.2		1974-01-01	No Photo Available

Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
Cryptantha wigginsii	Wiggins' cryptantha	Boraginaceae	annual herb	Feb-Jun	None	None	G2	S1	1B.2		2013-05-21	No Photo Available
Deinandra mohavensis	Mojave tarplant	Asteraceae	annual herb	(Jan-May)Jun-Oct	None	CE	G3	S3	1B.3	Yes	1974-01-01	No Photo Available
Deinandra paniculata	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2		2001-01-01	No Photo Available
Dodecahema leptoceras	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
Eryngium aristulatum var. *parishii*	San Diego button-celery	Apiaceae	annual/perennial herb	Apr-Jun	FE	CE	G5T1	S1	1B.1		1974-01-01	No Photo Available
Erythranthe diffusa	Palomar monkeyflower	Phrymaceae	annual herb	Apr-Jun	None	None	G4	S3	4.3		1974-01-01	 Ron Vanderhoff, 2019
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	Campanulaceae	annual herb	Apr-Jun	None	None	G5T1Q	S1	3.1	Yes	1980-01-01	No Photo Available
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	Mar-May	None	None	G4	S3	4.2		1980-01-01	 © 2015 Keir Morse
Holocarpha virgata ssp. *elongata*	graceful tarplant	Asteraceae	annual herb	May-Nov	None	None	G5T3	S3	4.2	Yes	1994-01-01	 © 2013 Anna Bennett
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		1988-01-01	 © 2019 Belinda Lo

Juncus luciensis	Santa Lucia dwarf rush	Juncaceae	annual herb	Apr-Jul	None	None	G3	S3	1B.2	Yes	2009-04-30	 © 2009 Keir Morse
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
Lathyrus splendens	pride-of-California	Fabaceae	perennial herb	Mar-Jun	None	None	G4	S4	4.3		1974-01-01	 © 2012 Ron Clark
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1994-01-01	 © 2015 Keir Morse
Microseris douglasii ssp. *platycarpha*	small-flowered microseris	Asteraceae	annual herb	Mar-May	None	None	G4T4	S4	4.2		2001-01-01	 © 2015 Richard Spellenberg
Myosurus minimus ssp. *apus*	little mousetail	Ranunculaceae	annual herb	Mar-Jun	None	None	G5T2Q	S2	3.1		1980-01-01	No Photo Available
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	FT	None	G2	S2	1B.1		1980-01-01	No Photo Available
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	FE	CE	G1	S1	1B.1		1974-01-01	No Photo Available
Parkinsonia microphylla	little-leaved palo verde	Fabaceae	perennial deciduous shrub	Apr-May	None	None	G5	S3	4.3		2001-01-01	No Photo Available
Penstemon californicus	California beardtongue	Plantaginaceae	perennial herb	May-Jun(Aug)	None	None	G3	S2	1B.2		1974-01-01	 Justin M. Wood 2009
Polygala cornuta var. *fishiae*	Fish's milkwort	Polygalaceae	perennial deciduous shrub	May-Aug	None	None	G5T4	S4	4.3		1974-01-01	No Photo Available
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2		2006-11-03	No Photo Available
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	Mar-Jun	None	None	G3	S3	4.2		1988-01-01	No Photo Available

Scutellaria bolanderi ssp. *austromontana*	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	None	None	G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
Sphaerocarpos drewiae	bottle liverwort	Sphaerocarpaceae	ephemeral liverwort		None	None	G1	S1	1B.1	Yes	2001-01-01	No Photo Available
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	Yes	2004-01-01	No Photo Available
Texosporium sancti-jacobi	woven-spored lichen	Caliciaceae	crustose lichen (terricolous)		None	None	G3	S2	3		2014-03-01	 ©2021 Scot Loring

Showing 1 to 55 of 55 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 18 May 2023].

APPENDIX D – NMFS Species List

From: Vincent Chevreuil
To: "nmfswcrca.specieslist@noaa.gov"
Subject: Skyview Pedestrian Bridge
Date: Thursday, July 15, 2021 10:53:20 AM
Attachments: image001.png

Quad Name **Bachelor Mountain**

Quad Number **33117-E1**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

Thank you,

Vincent Chevreuil
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APPENDIX E – NRCS Soil Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Western Riverside Area, California

Skyview Bridge Project

August 27, 2019

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:1,730 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 11, Sep 12, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 25, 2019—Jun 25, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cf	Chino silt loam, drained, saline-alkali	2.1	38.3%
MmB	Monserate sandy loam, 0 to 5 percent slopes	0.6	11.1%
WyC2	Wyman loam, 2 to 8 percent slopes, eroded	2.1	38.7%
YbC	Yokohl loam, 2 to 8 percent slopes	0.0	0.7%
YbE3	Yokohl loam, 8 to 25 percent slopes, severely eroded	0.6	11.2%
Totals for Area of Interest		**5.5**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Western Riverside Area, California

Cf—Chino silt loam, drained, saline-alkali

Map Unit Setting

National map unit symbol: hcs7
Elevation: 3,100 feet
Mean annual precipitation: 8 to 20 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 230 to 340 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Chino and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Chino

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 14 inches: silt loam
H2 - 14 to 27 inches: silty clay loam
H3 - 27 to 60 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Strongly saline (16.0 mmhos/cm)
Available water storage in profile: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 3w
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: SILTY BASIN (R019XD068CA)
Hydric soil rating: No

Minor Components

Chino

Percent of map unit: 5 percent

Hydric soil rating: No

Unnamed

Percent of map unit: 5 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 3 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Hydric soil rating: No

MmB—Monserate sandy loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: hcx4
Elevation: 700 to 2,500 feet
Mean annual precipitation: 10 to 18 inches
Mean annual air temperature: 63 to 64 degrees F
Frost-free period: 220 to 280 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Monserate and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monserate

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from granite

Typical profile

H1 - 0 to 10 inches: sandy loam
H2 - 10 to 28 inches: sandy clay loam
H3 - 28 to 45 inches: indurated
H4 - 45 to 57 inches: cemented
H5 - 57 to 70 inches: loamy coarse sand, coarse sandy loam
H5 - 57 to 70 inches:

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: 20 to 39 inches to duripan
Natural drainage class: Well drained
Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: LOAMY (1975) (R019XD029CA)
Hydric soil rating: No

Minor Components

Tujunga

Percent of map unit: 5 percent
Hydric soil rating: No

Hanford

Percent of map unit: 5 percent
Hydric soil rating: No

Greenfield

Percent of map unit: 5 percent
Hydric soil rating: No

WyC2—Wyman loam, 2 to 8 percent slopes, eroded

Map Unit Setting

National map unit symbol: hd0f
Elevation: 300 to 2,500 feet
Mean annual precipitation: 9 to 25 inches
Mean annual air temperature: 59 to 63 degrees F
Frost-free period: 200 to 300 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Wyman and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wyman

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Typical profile

H1 - 0 to 14 inches: loam
H2 - 14 to 36 inches: clay loam
H3 - 36 to 50 inches: stratified loam to clay loam
H4 - 50 to 60 inches: stratified loam to clay loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: LOAMY (1975) (R019XD029CA)
Hydric soil rating: No

Minor Components

Honcut

Percent of map unit: 10 percent
Hydric soil rating: No

Buren

Percent of map unit: 5 percent
Hydric soil rating: No

YbC—Yokohl loam, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: hd0g
Elevation: 500 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Yokohl and similar soils: 85 percent
Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yokohl

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous rock

Typical profile

H1 - 0 to 10 inches: loam
H2 - 10 to 26 inches: clay loam
H3 - 26 to 30 inches: indurated
H4 - 30 to 60 inches: stratified sandy loam to gravelly loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: 20 to 39 inches to duripan
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Very low (about 2.3 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: CLAYPAN (1975) (R019XD061CA)
Hydric soil rating: No

Minor Components

Wyman

Percent of map unit: 5 percent
Hydric soil rating: No

Porterville

Percent of map unit: 5 percent
Hydric soil rating: No

Buren

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

YbE3—Yokohl loam, 8 to 25 percent slopes, severely eroded

Map Unit Setting

National map unit symbol: hd0j
Elevation: 500 feet
Mean annual precipitation: 10 to 14 inches
Mean annual air temperature: 61 to 64 degrees F
Frost-free period: 260 days
Farmland classification: Not prime farmland

Map Unit Composition

Yokohl and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Yokohl

Setting

Landform: Alluvial fans
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Convex
Parent material: Alluvium derived from igneous rock

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 20 inches: clay loam
H3 - 20 to 24 inches: indurated
H4 - 24 to 60 inches: stratified sandy loam to gravelly loam

Properties and qualities

Slope: 8 to 25 percent
Depth to restrictive feature: 10 to 20 inches to duripan
Natural drainage class: Well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Very low (about 1.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: CLAYPAN (1975) (R019XD061CA)
Hydric soil rating: No

Minor Components

Wyman

Percent of map unit: 5 percent
Hydric soil rating: No

Porterville

Percent of map unit: 5 percent
Hydric soil rating: No

Buren

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

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APPENDIX F – Wetland and Waterway Delineation Report

October 2020

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT

Skyview Road Pedestrian Bridge

Wetland and Waterway Delineation Report

PROJECT NUMBER:
164717

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POWER ENGINEERS

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Wetland and Waterway Delineation Report

PREPARED FOR: RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT

PREPARED BY: POWER ENGINEERS, INC.

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ACRONYMS AND ABBREVIATIONS

CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
CGP	Construction General Permit
County	County of Riverside
CWA	Clean Water Act
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
FEMA	Federal Emergency Management Agency
NAIP	National Agriculture Imagery Program
NHD	National Hydrography Dataset
NI	No Indicator
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
NWP	Nationwide Permit
OBL	Obligate
OHWM	Ordinary High-water Mark
POWER	POWER Engineers, Inc.
Project	Skyview Road Pedestrian Bridge
RWQCB	Regional Water Quality Control Board, San Diego
SWPPP	Stormwater Pollution Prevention Plan
UPL	Upland
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WOTUS	Waters of the United States

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1.0 PROJECT DESCRIPTION

The County of Riverside (County) is proposing to construct a new pedestrian bridge to traverse the gap along the Skyview Road at the Warm Springs Valley / French Valley Channel (Project). Skyview Road is designated as a collector street that connects Highway 79 and Pourroy Road in the French Valley community in the unincorporated area of Riverside County, California. Approximately 800 feet east of Highway 79 (Winchester Road) is the Warm Springs Valley / French Valley Channel. There is a gap in Skyview Road where there is no road crossing the Warm Springs Valley / French Valley Channel. The County has determined a need to provide continuity on the Skyview Road for travelers within the French Valley community to traverse the Warm Springs Valley / French Valley Channel and has determined a vehicular bridge on Skyview Road will not be built. In the place of a vehicular bridge, a multipurpose pedestrian and bicyclist bridge will be constructed. A new library, the French Valley Library, is also anticipated to be constructed at the northwest quadrant of the pedestrian bridge in a separate project by the County of Riverside. The approximate starting and ending points of the pedestrian bridge are indicated below:

- Northwest side: 33^0 36’ 25.72” N, -117^0 06’ 27.60” W
- Southeast side: 33^0 36’ 23.00” N, -117^0 06’ 24.20” W

The purpose of the Project is to:

- Construct a multipurpose pedestrian and bicyclist bridge.
- Provide pedestrian access for residence east of the Warm Springs Valley / French Valley Channel to the proposed library at the northwest quadrant of the proposed bridge.
- Provide an aesthetically pleasing pedestrian bridge to compliment the proposed library as well as the surrounding suburban neighborhood.

2.0 REGULATORY AUTHORITY

There are three key agencies that regulate activities within inland streams, washes, wetlands, and riparian areas in California. These agencies and respective regulations are described below.

2.1 United States Army Corps of Engineers

The Clean Water Act (CWA) (33 United States Code §1251 et seq., formerly the Federal Water Pollution Control Act of 1972) (United States Environmental Protection Agency [USEPA] 1972) was enacted with the intent of restoring and maintaining the chemical, physical and biological integrity of the waters of the United States (WOTUS).

WOTUS, including wetlands, are subject to United States Army Corps of Engineers (USACE) jurisdiction under Section 404 of the CWA. A Section 404 permit is required for the discharge of dredged or fill material into WOTUS. Section 404 of the CWA applies to all jurisdictional WOTUS, including wetlands. The USACE jurisdiction over non-tidal WOTUS extends to the “ordinary high-water mark provided the jurisdiction is not extended by the presence of wetlands” (33 Code of Federal Regulations [CFR] Part 328.4 [USEPA 1972]); and under 40 CFR Part 230.3 (s)(1) (USEPA 1972). Jurisdictional waters include surface waters, such as navigable waters and their tributaries, all interstate waters and their tributaries, natural lakes, all wetlands adjacent to other jurisdictional waters and all impoundments of these waters.

On April 21, 2020, the USEPA and the Department of the Army published the Navigable Waters Protection Rule to define "Waters of the United States" in the Federal Register. For the first time, the agencies are streamlining the definition so that it includes four simple categories of jurisdictional waters, provides clear exclusions for many water features that traditionally have not been regulated, and defines terms in the regulatory text that have never been defined before. The Navigable Waters Protection Rule regulates traditional navigable waters and the core tributary systems that provide perennial or intermittent flow into them.

The four clear categories of waters which are federally regulated are (USEPA 2020):

- The territorial seas and traditional navigable waters.
- Perennial and intermittent tributaries to those waters.
- Certain lakes, ponds, and impoundments.
- Wetlands adjacent to jurisdictional waters

The final rule also details 12 categories of exclusions, features that are not WOTUS, such as features that only contain water in direct response to rainfall (e.g., ephemeral features); groundwater; many ditches; prior converted cropland; and waste treatment systems.

The Project lies within the USACE Los Angeles District and the following regional conditions for the 2017 Nationwide Permits (NWP) may apply to this Project. Submission of a Pre-Construction Notification pursuant to General Condition 32 and Regional Condition 3 shall be required for specific regulated activities in the following locations:

- The Murrieta and Temecula Creek watersheds in Riverside County, California for any regulated activity that would result in a loss of WOTUS. The definition of "loss of WOTUS" for this regional condition is the same as the definition used for the Nationwide Permit Program.
- Within the Murrieta Creek and Temecula Creek watersheds in Riverside County the use of NWP 14 Linear Transportation Project, shall be restricted, such that a loss of WOTUS cannot exceed 0.25 acre. The definition of "loss of WOTUS" for this regional condition is the same as the definition used for the NWP Program.

2.2 State Water Resources Control Board and Regional Water Quality Control Board

2.2.1 CWA Section 401

Pursuant to Section 401 of the federal CWA, any permit or license issued by a federal agency for an activity that may result in a discharge into WOTUS requires certification from the state in which the discharge originates. This requirement allows each state to have input into federally approved projects that may affect its waters (rivers, streams, lakes, and wetlands) and to ensure the projects will comply with state water quality standards and any other water quality requirements of state law. State certification ensures that the Project will not adversely impact impaired waters (waters that do not meet water quality standards) and that the Project complies with applicable water quality improvement plans (total maximum daily loads). The states must grant, deny, or waive water quality certification for a project before a federal permit or license can be issued. The Regional Water Quality Control Board (RWQCB) 9, San Diego would provide Section 401 Water Quality Certifications for the federally issued permits, including the 404 permits and notifying and non-notifying NWPs.

Effective May 28, 2020, the State Water Resources Control Board adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures). The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

2.2.2 CWA Section 402

To comply with criteria described in Section 402 of the federal CWA, all construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more, must obtain an National Pollutant Discharge Elimination System (NPDES) permit for stormwater discharges (40 CFR Parts 122 and 123; USEPA 1972). NPDES permits (also called Construction General Permits or CGPs) are issued by the USEPA or similar authorized state entity following submittal of a Notice of Intent for construction activities, and preparation of a Stormwater Pollution Prevention Plan (SWPPP) that describes how erosion and sediment transport will be minimized to adjacent water bodies.

The state of California CGP for stormwater discharges associated with construction activities regulates stormwater discharges from all construction activities that disturb one or more acres. To obtain coverage under this CGP, the appropriate legally responsible person must electronically file the Permit Registration Documents, which include an Notice of Intent, SWPPP, and other documents required by this CGP, and mail the appropriate permit fee to the RWQCB, prior to commencement of construction activities. The SWPPP describes potential pollution sources and the Best Management Practices, which will be used to prevent stormwater contamination. The Notice of Intent describes the construction project and route(s) that stormwater may take from the construction site to surface WOTUS

It is expected that as the stormwater program develops, the RWQCB may issue General Permits or Individual Permits that contain more specific permit provisions. When this occurs, the General Permit will no longer regulate those dischargers that obtain coverage under Individual Permits. There is no specified time-table for when these provisions may occur.

A copy of the applicable SWPPP shall remain with the Construction Manager on the construction site or at a staging area(s). The SWPPP must be readily available while the Project is under construction, from the start of construction activities until the Notice of Termination is filed.

To ensure that water quality is being protected, the CGP requires that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer. A Qualified SWPPP Developer must possess one of the eight certifications and or registrations specified in the CGP, and effective two years after the adoption date of the CGP, must have attended a RWQCB-sponsored or approved Qualified SWPPP Developer training course.

Each project must complete a risk determination analysis, which determines sampling, monitoring, and reporting requirements. There are two major requirements related to site planning and risk determination in the CGP. The Project's overall risk is broken up into two elements: 1) Project sediment risk (the relative amount of sediment that can be discharged, given the Project and location details); and 2) receiving water risk (the risk sediment discharges pose to the receiving waters).

2.2.3 Report of Waste Discharge

Generally, any applicant proposing to discharge waste into a water body must file a Report of Waste Discharge in the event there is no Section 404/401 nexus, pursuant to California Water Code Section

13260, which is used to start the application process for all waste discharge requirements and NPDES permits (described above). Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB also interprets it to include discharge of dredged and fill material into water bodies. Typical activities that affect water include, but are not limited to, the following:

- Discharge of process wastewater not discharging to a sewer (factories, cooling water, etc.)
- Confined Animal facilities (dairies, feedlots, etc.)
- Waste containments (landfills, waste ponds, etc.)
- Construction sites
- Boatyards and shipyards
- Discharges of pumped groundwater and cleanups (underground tank cleanups, dewatering, spills)
- Material handling areas draining to storm drains
- Sewage treatment facilities
- Filling of wetlands
- Dredging, filling, and disposal of dredge wastes
- Commercial activities not discharging to a sewer (e.g. factory wastewater, storm drain)
- Waste discharges to land

2.2.4 Porter-Cologne Water Quality Control Act (as Amended)

This law gives broad authority to the State Water Resources Control Board and California's nine RWQCBs to establish water quality standards and discharge prohibitions, issue waste discharge requirements, and implement provisions of the federal CWA, including Section 401 Water Quality Certification. The Project lies within the jurisdiction of the San Diego RWQCB, which administers the Water Quality Control Plan for protection of beneficial uses of surface and groundwater for this part of the state.

2.3 California Department of Fish and Wildlife

California Department of Fish and Wildlife (CDFW) is responsible for protecting and conserving fish and wildlife resources, and the habitats upon which they depend per the following:

- California Fish and Game Code, Sections 1600-1616, as Amended: The CDFW regulates activities that would divert or obstruct the natural flow or otherwise substantially change the bed, channel, or bank of any river, stream, or lake, or that would deposit or dispose of debris, waste, or other material where it may pass into any river, stream, or lake that supports fish or wildlife. This jurisdiction also applies to riparian habitats associated with watercourses. The Lake and Streambed Alteration Program (Section 1602) reviews projects that would alter any river, stream, or lake and conditions projects to conserve existing fish and wildlife resources. Projects must notify the CDFW if a project that will substantially modify a river, stream, or lake.
- California Fish and Game Code, Sections 5650-5656, as Amended: These codes state that it is unlawful to deposit in, permit to pass into, or place where it can pass into waters of the State any substance that is deleterious to fish, plant life, mammals, or bird life.

3.0 DESKTOP REVIEW

Prior to the commencement of the on-site field investigation, POWER Engineers, Inc. (POWER) reviewed available technical documents, databases, and maps to determine the potential extent of wetlands and waterways within the Project area. These data included:

- United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Maps: Bachelor Mountain, California (USGS 2018).
- National Agriculture Imagery Program (NAIP) Aerial Photography (NAIP 2017).
- United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) Wetlands Mapper (USFWS 2020).
- USGS National Hydrography Dataset (NHD) mapper (USGS 2020).
- Federal Emergency Management Agency (FEMA) floodplain mapping (2020).
- United States Department of Agriculture, Natural Resource Conservation Service (NRCS) Web Soil Survey (NRCS 2020).

3.1 History of Site

The original conditions of approval of the adjacent Bella Sol and Capistrano developments required the placement of flood protection measures (slope protection) along the French Valley Creek floodplain and the installation of a waterline across the floodplain. The slope protection measures were required to meet standards set by the Riverside County Flood Control and Water Conservation District because the improvements are operated and maintained by the District. The Conservation District standards required access roads and turnarounds to allow for future maintenance, such as repair and restoration (grading and over-excavation to the toe of the slope protection), vegetation control, and graffiti removal.

The work also involved relocating approximately 290 linear feet of low flow channel within French Valley Creek. The new low flow channel was designed to have the same bottom width, channel depth, side slopes, and radius as the existing channel to minimize potential erosion. Realigning the low flow channel creates an area on the southeast (Capistrano) side for access to the toe of the slope for inspection and maintenance activities. The access point will also minimize potential impacts to riparian habitat during future maintenance activities conducted by the Conservation District. Upon project completion, the realigned low flow channel was vegetated to replicate the preconstruction conditions.

3.2 Regional Conditions and Topography

The Project is within the Peninsular Range and is in the Lower Californian Province of the Pacific Mountain System. This Major Land Resource Area is an area of narrow mountain ranges and broad fault blocks. Elevation in the region ranges from 1,000 to 7,900 feet in most of the region. Elevation of the Project area ranges from approximately 1,280 to 1,375 feet above sea level and slopes range between 0 and 25 percent. The strongly sloping to precipitous mountains have unstable slopes and sharp crests. Valleys are typically narrow and are filled with alluvium. Most of the valleys have streams with actively eroding banks. Runoff in this region is generally rapid. All but the larger streams and those that drain from the higher watersheds are dry through the summer and in periods of low precipitation.

The Project is within the Warm Springs Creek, USGS Hydrologic Unit Code 180703020401, which is within the Santa Margarita watershed (Hydrologic Unit Code 18070302). The waterways in the French Valley generally drain southwest into Warm Springs Creek, which drains into Murrieta Creek. The creeks

in this area are identified as intermittent. Murrieta Creek drains into the perennial San Margarita River, which drains to the southwest and enters the Pacific Ocean north of the Camp Pendleton Marine Corps Base.

The average annual precipitation in this region is 8 to 51 inches, increasing with elevation. Most of the rainfall occurs as low- or moderate-intensity, Pacific frontal storms during winter. Rain can turn to snow at the higher elevations. A little snow may fall in winter, but it does not last. Summers are dry. The average annual temperature is 41 to 66 degrees Fahrenheit, decreasing with elevation. The freeze-free period averages 245 days and ranges from 125 to 365 days in most of the region. It decreases in length with elevation.

3.3 Aerial Photography

Current and historical aerial photographs of the Project site were available from Google Earth Pro Imaging. According to the 1996 through 2018 aerial photographs, there are indications of riparian vegetation and/or wetlands in the channel and a potential intermittent stream. Aerial photography for the site is shown in Appendix A.

3.4 National Wetland Inventory Wetlands and Waterways

According to the NWI data, one type of waterway was identified within the Project survey area (see maps in Appendix A). Table 1 identifies the NWI feature located within the Project survey area and the NWI description of those features. NWI classifies wetlands and waterways according to the *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et al. 1979). The Cowardin classification is a taxonomic system that divides wetlands and deepwater habitats into five systems based on hydrologic factors (Marine, Estuarine, Riverine, Lacustrine, and Palustrine).

The NWI-identified feature is a potential jurisdictional waterway. The NWI database does not always provide an accurate inventory of on-site wetland and waterway features as NWI data are typically based on aerial photograph interpretation and are not usually ground-verified.

TABLE 1 NWI WATERWAY FEATURES

CODE	WETLAND DESCRIPTION	WATER REGIME
R4SBA	R – Riverine 4 – Intermittent SB – Streambed A – Temporary flooded	A - Temporary flooded: Surface water is present for brief periods (from a few days to a few weeks) during the growing season, but the water table usually lies well below the ground surface for most of the season.

The riverine system includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens; and (2) habitats with water containing ocean-derived salinity of 0.5 percent or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water (Cowardin et al. 1979). The intermittent subsystem is characterized by a channel that contains nontidal flowing water for only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.

3.5 National Hydrography Dataset

The NHD and topographic map indicates that an intermittent stream flows within the channel between the start and end points of the proposed Skyview Road pedestrian bridge. It flows in a southwesterly direction. NHD features are shown on the map in Appendix A.

3.6 Floodplain

FEMA classifies the Project area as undetermined flood hazard also known as Zone D (FEMA 2008).

3.7 Soils

Two soil map units are identified by NRCS within Project disturbance areas and are described in Table 2 and shown on the maps in Appendix A. The Chino silt loam soil type is located within the channel and the Wyman loam soil type is located on the slopes adjacent to the channel. There are no soil map units identified as hydric by NRCS.

TABLE 2 NRCS SOILS

SOIL MAP UNIT NAME AND ID	CHARACTERISTICS	DRAINAGE	RUNOFF	HYDRIC
Chino silt loam (Cf)	Drained, saline-alkali, 0-2 percent slopes, located on floodplains	Somewhat poorly drained	Medium	No
Wyman loam (WyC2)	Eroded, 2-8 percent slopes, located on alluvial fans	Well drained	Medium	No

4.0 DELINEATION METHODOLOGY

The field investigation focused on determining the presence of potential jurisdictional wetlands and waterways within disturbance areas of the Project. The following USACE and CDFW guidance documents were used to determine WOTUS, waters of the State, and CDFW jurisdictional limits:

- "Routine Onsite Determination Method" described in the USACE Wetlands Delineation Manual (Environmental Laboratory 1987)
- *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008a)
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008b)
- *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010)
- *A Review of Stream Processes and Forms in Dryland Watersheds* (CDFW 2010)

4.1 Wetlands

The identification of wetlands is based on a three-parameter approach involving indicators of hydrophytic vegetation, hydric soils, and wetland hydrology. USACE, CDFW, and RWQCB jurisdictional wetlands must exhibit characteristics within each of these three parameters and they are discussed below. Per the State Water Resources Control Board's, State Wetland Definition and Procedures for Discharges of

Dredged or Fill Material to Waters of the State (adopted April 2.2019) (SWRCB 2019), The methods described here shall be modified from the USACE 1987 Manual and Supplements, only to allow for the fact that the lack of vegetation does not preclude the determination of such an area that meets the definition of wetland.

4.1.1 Hydrophytic Vegetation

Species abundance in both upland and wetland communities were visually estimated and recorded. Dominant trees and shrubs/saplings were recorded within a 30-foot and 15-foot radius, respectively, from the center of each documentation plot. Woody vines were recorded within a 30-foot radius of the plot. Dominant herbaceous vegetation was recorded within a 5.0-foot radius of the plot. The indicator status of each species was identified using the National Wetland Plant List for the Arid West Region (USACE 2018).

The presence of hydrophytic vegetation within a representative plant community was positively identified if more than 50 percent of the dominant species within the community had an indicator status of Obligate (OBL), Facultative wetland (FACW), or Facultative (FAC). Table 3 provides a summary of the wetland indicator status. This determination method is referred to as the dominance test. Dominant plant species are determined using the "50/20 rule" defined in the *1987 Wetlands Delineation Manual* (Environmental Laboratory 1987). If the plant community failed the dominance test, but indicators for hydric soils or wetland hydrology were present, the plant community was examined for additional hydrophytic vegetation indicators. These hydrophytic vegetation indicators are identified in the Regional Supplement and include the prevalence index, evidence of morphological adaptations for growth in a wetland, and problematic hydrophytic vegetation (USACE 2008a). Upland (UPL) vegetation is identified as Facultative Upland, Obligate Upland, or No Indicator (NI), which is assumed to be UPL.

TABLE 3 SUMMARY OF WETLAND PLANT INDICATOR STATUS

CATEGORY	ACRONYM	PROBABILITY
Obligate Wetland	OBL	Almost always occur in wetlands (estimated probability 99 percent)
Facultative Wetland	FACW	Usually occur in wetlands (estimated probability of 67-99 percent)
Facultative	FAC	Equally likely to occur in wetland/non-wetlands (estimated probability of 34-66 percent)
Facultative Upland	FACU	Usually occur in non-wetlands (estimated probability 99 percent)
Upland	UPL	Almost always occur in non-wetlands (estimated probability >99 percent)
No indicator	NI	No indicator status has been assigned – assumed upland.

Under the California Fish and Wildlife Code, CDFW has jurisdiction over proposed impacts to vegetation associated with waters of the State.

4.1.2 Hydrology

Site hydrology was evaluated during the field survey by initially observing whether the soil at the surface was inundated or saturated. If the ground surface was dry, the depth to freestanding groundwater or saturated soil was measured, and the presence or absence of other indicators of wetland hydrology (e.g., drift lines, water stained leaves) was noted. The wetland hydrology criterion was met if one or more primary or two or more secondary field indicators were present (Environmental Laboratory 1987). However, during the survey, those wetlands which lacked any hydrology indicators due to temporarily

dry conditions, disturbance, or other factors and did not meet the 1987 USACE Manual criteria were evaluated using criteria from the Regional Supplement (USACE 2008a).

4.1.3 Hydric Soils

At each soil data sampling plot, a hole was dug at a width of five inches and a length of five inches to depths necessary to accurately determine a soil's hydric status. The Wetland 1 and Upland 1 soil sampling plots are shown on the map in Appendix A. The soil sample plot is typically dug to a depth of 16 to 24 inches below ground surface. The information collected for each soil profile included soil horizons, depth, texture, color, and hydric soil characteristics including organic content, accumulation of sulfides, gley formation, redoximorphic concentrations and depletions, and the visually-detectable depletion of minerals such as iron and manganese. Colors of the soil matrix and concentrations/depletions were identified using Munsell Soil Color Charts (Munsell 2000). Hydric soil determinations were based on criteria established in the 1987 USACE Manual (Environmental Laboratory 1987), along with Field Indicators of Hydric Soils in the United States (NRCS 2017), and the Arid West Regional Supplement (USACE 2008a).

4.2 Waterways

Any waterways (OHWM and/or defined bed and bank) observed within the Project survey area were classified based on the observed flow and channel characteristics at the time of field review. These features were also demarcated on aerial imagery maps. The specific methods for characterizing the OHWM for determining the presence of WOTUS and state jurisdictional areas are indicated as follows.

The OHWM is indicated by shelving, changes in sediment texture, and changes in vegetation. The active floodplain is formed by a low- to moderate-discharge event in the Arid West and is frequently identified by a break in slope indicating the outer extent of ordinary high discharges. Depending on the time that has passed since the last ordinary high event, the active floodplain often has early to mid-community successional stage vegetation. The sediment texture is generally coarser grained than that in the surrounding floodplain units. The low terrace, which is above the OHWM, is inundated less frequently than the active channel and is characterized by well-established, late-stage vegetation, and the surface may show indications of desert pavement or surface relief.

The following field verification techniques were applied:

1. General overview of the channel and floodplain.
2. Selected a cross-section of the channel.
3. Assessed the cross-section including characteristics of the floodplain and indicators present at the site.
4. Identified the OHWM and mapped on aerial photography.

5.0 FIELD INVESTIGATION RESULTS

Wendy Hosman, a Professional Wetland Scientist, with assistance from Omar Tinoco Gallardo, a certified Qualified SWPPP Developer, completed an on-site field investigation on July 16, 2020 to determine the presence of potential jurisdictional wetlands and waterways within the Project survey area. The results of the investigation are discussed below.

5.1 Wetlands

The investigation identified an intermittent stream (discussed in Section 5.2) with an adjacent wetland complex within the channel that will be crossed by the pedestrian bridge. The wetland boundaries were identified via the field investigation and mapped on aerial photography. The delineated wetland is shown on the map in Appendix A. Photographs of the wetland are in Appendix B and the wetland and upland data sheets are in Appendix C.

5.1.1 Hydrophytic Vegetation

The hydrophytic vegetation indicators at the wetland sample point are dominant species of Goodding's willow (*Salix gooddingii*), with an Arid West wetland indicator status of FACW, and southern cattail (*Typha domingensis*), with an Arid West wetland indicator status of OBL. Beyond the wetland sample point, the southeastern edge of the wetland is dominated by southern cattail and this extends to the bank on the southeastern edge of the channel. Other wetland and riparian plants that were observed within the channel are listed in Table 4, along with their wetland indicator status. Due to restoration activities, there is either wetland and/or floodplain vegetation for the full extent of the channel.

TABLE 4 RIPARIAN AND WETLAND VEGETATION

SCIENTIFIC NAME	COMMON NAME	ARID WEST INDICATOR STATUS
Anemopsis californica	Yerba mansa	OBL
Baccharis salicifolia	Mule fat	FAC
Distichlis spicata	Salt grass	FAC
Eleocharis parishii	Parish's spike rush	FACW
Juncus arcticus var. *mexicanus*	Mexican rush	FACW
Mimulus guttatus	Seep monkey flower	OBL
Muhlenbergia rigens	California deergrass	FAC
Pluchea odorata	Salt marsh fleabane	FACW
Polygonum lapathifolium	Dock-leaf smartweed	FACW
Polypogon monspeliensis	Annual beard grass	FACW
Salix gooddingii	Goodding's willow	FACW
Salix laevigata	Red willow	FACW
Stachys rigida subsp. *rigida*	Rigid hedge-nettle	FACW
Typha domingensis	Southern cattail	OBL

5.1.2 Hydrology

The primary wetland hydrology indicators at the wetland sample point include a high-water table at 12 inches and saturation at two inches. Beyond the wetland sample point, other primary wetland hydrology indicators within the channel include surface water in the stream channel and surface soil cracks. Secondary wetland hydrology indicators beyond the wetland sample point include sediment deposits and drift deposits.

5.1.3 Hydric Soils

The soils at the wetland sample point were characterized as silt loam with some clay content. The color of the soil at 0- to 2- inches was 5YR 2.5/2 and the color of the soil at 2- to 16-inches was 5YR 2.5/1. There was a two percent concentration of redox features with a color of 5YR 3/4 within the matrix. This hydric soil is classified as a redox dark surface.

5.2 Waterway

The stream's OHWM is depicted on a map in Appendix A. Photographs of the channel are in Appendix B and an OHWM is included in Appendix C.

Observed riparian and wetland vegetation and their wetland indicator status are listed in Table 5. Within the non-wetland area between the OHWM lines there are small channels and water movement indicators including soil cracks, ripples, sediment deposits, and drift deposits. There is rip-rap on both sides of the larger channel between the start and end points of the proposed Skyview Road Pedestrian Bridge. The rip rap edge creates a definitive OHWM on the southeastern edge of the channel.

The placement of flood protection measures and the subsequent revegetation activities have created a floodplain channel that extends from the eastern rip-rap bank to the western rip-rap bank. Either floodplain and/or wetland vegetation is located within the entire extent of the channel.

There is a concrete structure on the southeastern bank of the channel (see map in Appendix A). This structure drains stormwater from the adjacent residences into the stream channel. This area is fenced off and can be seen in the photographs in Appendix B. Since this area is connected to the stream channel, it would be considered part of both the wetland and waterway OHWM, up to the base of the rip-rap slope.

5.3 Jurisdiction and Estimated Disturbance

The wetland, intermittent stream, and associated OHWM would be considered both WOTUS and waters of the State under RWQCB jurisdiction. The entire channel would be under CDFW jurisdiction. The wetland and waterway features are described in Table 5 and shown on the map in Appendix A..

TABLE 5 JURISDICTION AND ESTIMATED DISTURBANCE

FEATURE ID AND LOCATION	NWI TYPE	DESCRIPTION	ACRES OF JURISDICTIONAL AREAS	LINEAR FEET OF JURISDICTIONAL AREAS AT BRIDGE CROSSING
W1 Wetland Lat: 33.6067 Long: -117.106872	R4SBA	Wetland complex associated with and including the intermittent stream channel. Dominant vegetation: Southern cattail	WOTUS and RWQCB: 0.9 acre	WOTUS and RWQCB: 202 feet
–OHWM West side Lat: 33.606953 Long: -117.107267 East side: Lat: 33.606447 Long: -11710675	R4SBA	OHWM associated with the intermittent stream, bordered by rip-rap on the southeast bank. Dominant vegetation: Southern cattail and Goodding's willow	WOTUS and RWCQB: 1.2 acres	WOTUS and RWQCB: 232 feet
CDFW West bank Lat: 33.607083 Long: -117.107572 East bank Lat: 33.606447 Long: -117.10675	R4SBA	Ultimate floodplain channel, which extends from west rip-rap bank to east rip-rap bank. Dominant vegetation: Southern cattail, Goodding's willow, red willow, and mule fat.	CDFW: 2.8	CDFW: 346 feet

6.0 PERMIT REQUIREMENTS

The following is a summary of the permits and authorizations that may be necessary prior to construction and/or alteration within jurisdictional areas.

6.1 United States Army Corps of Engineers

WOTUS, including wetlands, are subject to USACE jurisdiction under Section 404 of the CWA. A Section 404 permit is required for the discharge of dredged or fill material into WOTUS. It is anticipated a Section 404 permit would be required for this Project.

6.2 State Water Resources Control Board

To comply with criteria described in Section 402 of the federal CWA, all construction site operators engaged in clearing, grading, and excavating activities that disturb one acre or more, must obtain an NPDES permit for stormwater discharges. NPDES permits (also called CGPs) are issued by the State Water Resources Control Board following submittal of a Notice of Intent for construction activities, and preparation of a SWPPP that describes how erosion and sediment transport will be minimized to adjacent water bodies. It is estimated the Project would not disturb over one acre, so a CGP and SWPPP would not be required.

6.3 Regional Water Quality Control Board, San Diego

The RWQCB regulates discharges to surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act. The RWQCB's jurisdiction extends to all waters of

the State and WOTUS, including wetlands. If a USACE Section 404 permit and NWP (notifying or non-notifying) is required, a Section 401 Water Quality Certification from the RWQCB would also be required. Since the wetland, intermittent stream, and OHWM are determined to be WOTUS and waters of the State, the RWQCB would also take jurisdiction over these features. A Notice of Intent for stormwater discharges may be used in place of the required RWQCB Form 200, Report of Waste Discharge, with approval from RWQCB, or both a Notice of Intent and Report of Waste Discharge may be required.

6.4 California Department of Fish and Wildlife, Inland Deserts Region

Pursuant to Section 1600 et seq. of the Fish and Game Code, the CDFW regulates any activity that will divert or obstruct the natural flow or alter the bed, channel, or bank (which may include associated biological resources) of a river or stream, and/or placement of any structures that will be placed or modified in or near the stream, river, or lake, and any channel clearing. The entire channel would be considered under the jurisdiction of CDFW; therefore, it would be necessary for the applicant to acquire a Section 1602 Lake and Streambed Alteration Agreement if there are impacts occurring near or within CDFW jurisdictional areas.

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APPENDIX A PROJECT MAPS

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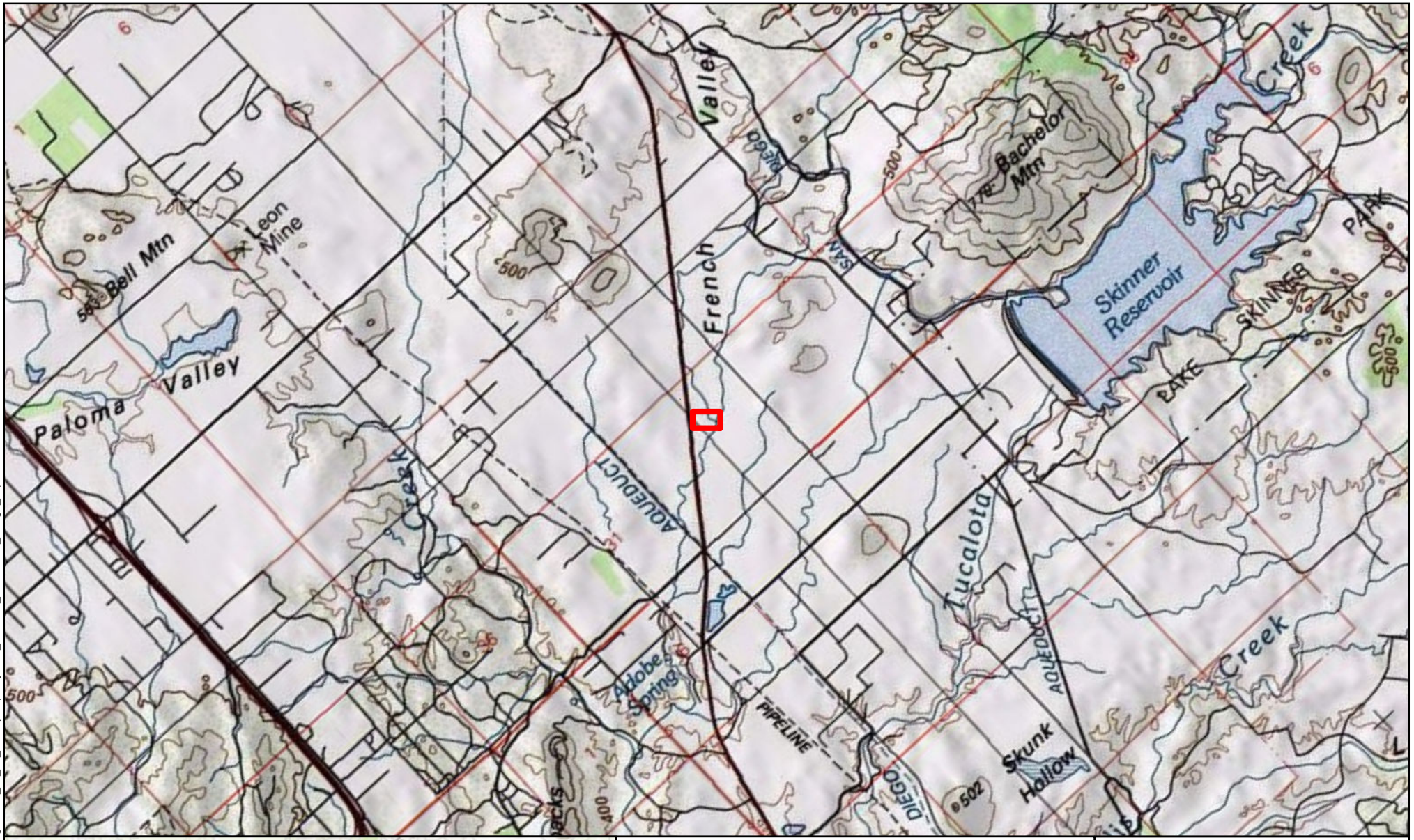

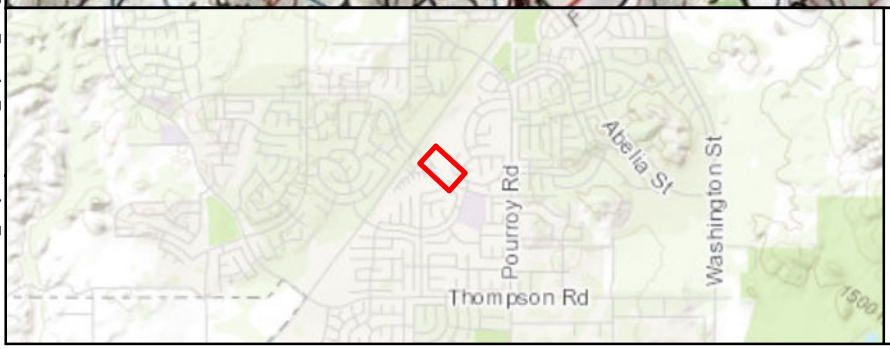

Project Area

Skyview Road Pedestrian Bridge

Wetlands and Waterways Topographic Vicinity

0 2,500 5,000 10,000

Feet

POWER ENGINEERS

Date: 10/15/2020

Aerial Photography: USDA NAIP\California 2018-07-23

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Project Area

Skyview Road Pedestrian Bridge

Wetlands and Waterways Aerial Overview

0 125 250 500 750

Feet

POWER ENGINEERS

Date: 10/15/2020

Aerial Photography: USDA NAIP\California 2018-07-23

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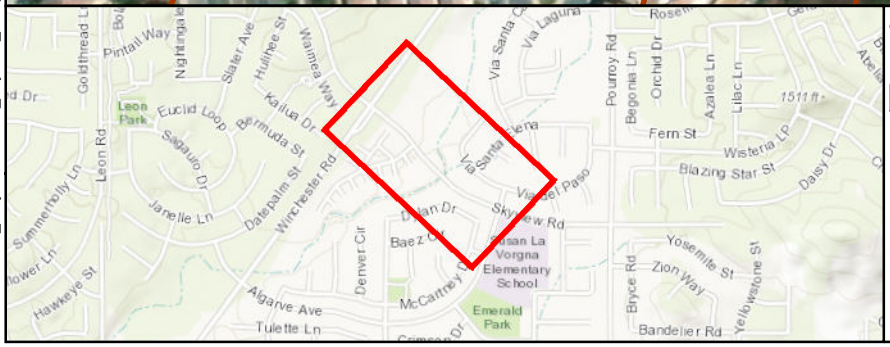

- Stream (NHD)
- Riverine (NWI)
- Soil Unit (NRCS SSURGO)

Skyview Road Pedestrian Bridge

Wetlands and Waterways NHD, NWI, and Soils Map

0 50 100 200 300

Feet

POWER ENGINEERS

Date: 10/15/2020

Aerial Photography: USDA NAIP\California 2018-07-23

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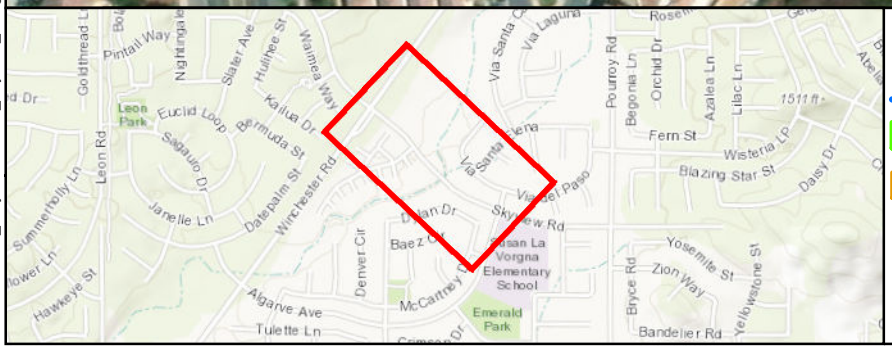

- Sample Point
- Pedestrian Bridge
- OHWM (Delineated)
- Wetland (Delineated)
- CDFW Jurisdiction (Project Survey Area)

Note: the linear feet measurements are at the approximate bridge location.

Skyview Road Pedestrian Bridge

Wetlands and Waterways Delineation

0 50 100 200 300

Feet

POWER ENGINEERS

Date: 10/15/2020

Aerial Photography: USDA NAIP\California 2018-07-23

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APPENDIX B PHOTOGRAPHS

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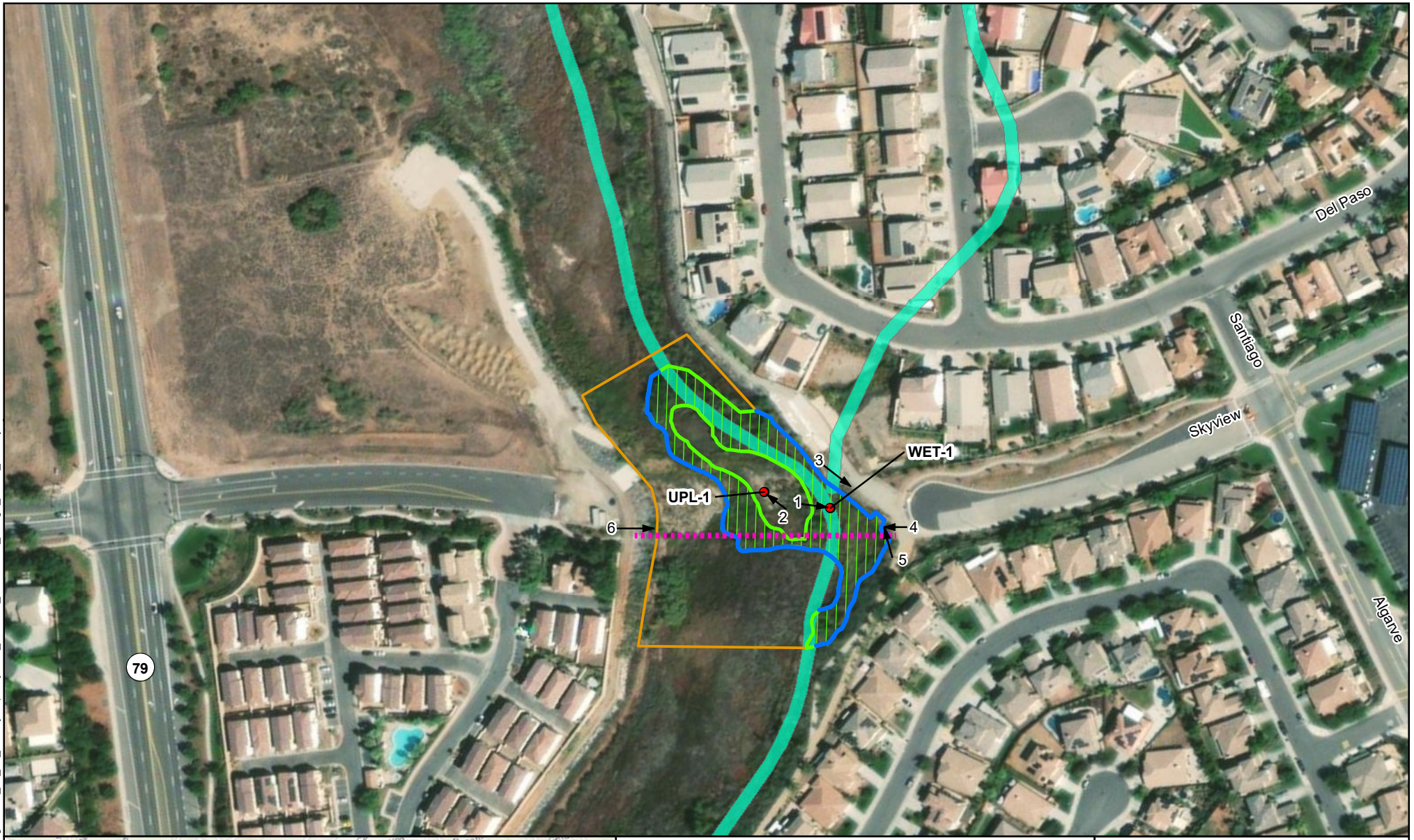

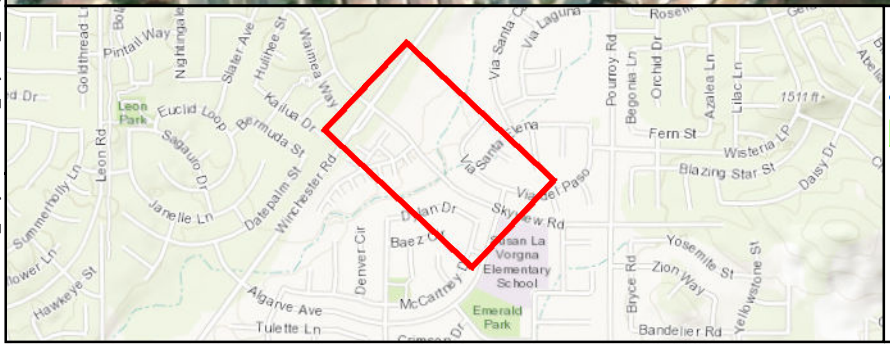

- Sample Point
- Pedestrian Bridge
- OHWM (Delineated)
- Wetland (Delineated)
- CDFW Jurisdiction (Project Survey Area)
- Riverine

Skyview Road Pedestrian Bridge

Wetlands and Waterways Photo Point Survey

0 50 100 200 300

Feet

POWER ENGINEERS

Date: 10/15/2020

Aerial Photography: USDA NAIP\California 2018-07-23

Path: U:\Enviro_Projects\136151_Skyview_Bridge\2020_04_13_SurveyMap\Skyview_Wetland_Pedestrian_Bridge_Photo_Survey.mxd

Photo Point 1: W1 Wetland sample point

Photo Point 2: W1 Upland sample point

Photo Point 3: W1 Wetland on southeast end looking south

Photo Point 4: W1 Wetland on southeast end looking north

Photo Point 5: W1 Wetland on southeast end looking east

Photo Point 6: W1 Wetland and floodplain looking southeast

APPENDIX C DATA FORMS

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Skyview Road City/County: Riverside County Sampling Date: 7/16/20

Applicant/Owner: Riverside County Transportation Dept. State: CA Sampling Point: WEST 1

Investigator(s): W. Hosman Section, Township, Range: 32, 6S, 2W

Landform (hillslope, terrace, etc.): Stream channel Local relief (concave, convex, none): concave Slope (%): 2

Subregion (LRR): LRR C Lat: 33.60067 Long: -117.106872 Datum: WGS84

Soil Map Unit Name: Chino silt loam NWI classification: R4SBA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' R)			
1. Salix goodingii	30	Y	FACW
2.			
3.			
4.			
5.			
	30 = Total Cover		
Herb Stratum (Plot size: 5' R)			
1. Typha domingensis	75	Y	OBL
2. Artemopsis californica	10	N	OBL
3. Heterotheca grandiflora	5	N	UPL
4.			
5.			
6.			
7.			
8.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. None			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: WET 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2"	5YR 0/2	100	—				silt loam w/some clay	
2-16"	5YR 2.5/1	98	5YR 3/4	2	C	M	silt loam w/some clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): 0

Water Table Present? Yes X No ___ Depth (inches): 12"

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 2"

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Skyview Road City/County: Riverside County Sampling Date: 7/16/20
Applicant/Owner: Riverside County Transportation Dept. State: CA Sampling Point: UPL1
Investigator(s): W. Hosman Section, Township, Range: 32, 6S, 2W
Landform (hillslope, terrace, etc.): Stream channel Local relief (concave, convex, none): concave Slope (%): 2
Subregion (LRR): LRRC Lat: 33.606931 Long: -117.107056 Datum: WGS84
Soil Map Unit Name: Chino silt loam NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____ No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. None			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. None			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Heterotheca grandiflora	10	Y	UPL
2. Xanthium strumarium	15	Y	FAC
3.			
4.			
5.			
6.			
7.			
8.			
	25 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. None			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 75 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 2 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species 1	x 3 = 3
FACU species ____	x 4 = ____
UPL species 1	x 5 = 5
Column Totals: 2 (A)	8 (B)

Prevalence Index = B/A = 2.67

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

SOIL

Sampling Point: UPL 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6"	5Y 5/2	100					silt loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Bedrock or hardpan

Depth (inches): 16"

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- X Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Skyview Road Pedestrian Bridge
Project Number: POWER #164388
Stream: S1
Investigator(s): W. Hosman
Date: 7/16/20 **Time:** 10:00 a.m.
Town: Riverside Co. **State:** CA
Photo begin file#: **Photo end file#:**

Y ☒ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☒ Is the site significantly disturbed?

Location Details: Channel between Skyview Road end points.

Projection: **Datum:** WGS84

Coordinates: 33.6067 -117.106872

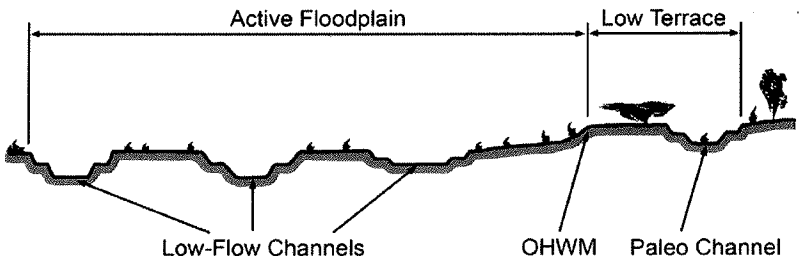
Potential anthropogenic influences on the channel system:
Both sides of the floodplain channel are lined with rip rap. There is a concrete structure on the southeastern edge of the channel which drains stormwater into the channel. Residences line both sides of the top of bank.

Brief site description:
An intermittent stream and adjacent wetland occur within a channel located between the end points of the Skyview Road endpoints.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates: 1996-2018
- ☒ Topographic maps
- ☐ Geologic maps
- ☒ Vegetation maps previous studies and reports
- ☒ Soils maps
- ☒ Rainfall/precipitation ~~maps~~ data
- ☐ Existing delineation(s) for site
- ☐ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

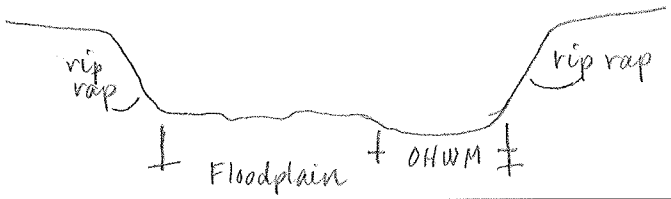


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☒ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☐ GPS
   - ☐ Other:

Project ID: Skyview Rd. **Cross section ID:** S1 **Date:** 7/16/20 **Time:** 10:00 a.m.

Cross section drawing:



OHWM

GPS point: 33.60067 -117.106872

Indicators:

- ☒ Change in average sediment texture
- ☒ Change in vegetation species
- ☒ Change in vegetation cover
- ☒ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

OHWM is on the southeastern edge of the channel, which extends from the rip rap bank to include much of the cattails.

Floodplain unit: ☐ Low-Flow Channel ☒ Active Floodplain ☐ Low Terrace

GPS point: 33.607019 -117.107556

Characteristics of the floodplain unit:

Average sediment texture: silt loam w/clay & sand

Total veg cover: 70 % Tree: 15 % Shrub: 70 % Herb: 40 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☒ Mid (herbaceous, shrubs, saplings) to
- ☒ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☒ Mudcracks
- ☒ Ripples
- ☒ Drift and/or debris
- ☒ Presence of bed and bank rip rap on banks
- ☐ Benches
- ☐ Soil development
- ☒ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Floodplain unit is bordered by rip rap on both sides of channel.

APPENDIX G – LBV and SWFL Survey Memorandums

BUSBY
Biological Services

October 2, 2020

Ms. Stacey Love
Recovery Permit Coordinator
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

RE: 2020 Least Bell's Vireo Survey Summary Report for the Proposed Skyview Pedestrian Bridge Project, Riverside County, California

Ms. Love:

This letter report summarizes the results of the focused, protocol-level, presence/absence surveys for the federally and state-listed endangered least Bell's vireo (*Vireo bellii pusillus*) conducted in 2020 for the proposed Skyview Pedestrian Bridge project (project). Busby Biological Services, Inc. (BBS) was contracted by POWER Engineers, Inc. to conduct these surveys on behalf of the County of Riverside (County) to determine the presence/absence of least Bell's vireo within and adjacent to the proposed project area.

PROJECT INFORMATION

The proposed project includes the construction of a new pedestrian bridge across the Warm Springs Valley/French Valley Channel, approximately 800 feet east of Highway 79. Currently, there is an undeveloped, County-owned easement at that location, with cul-de-sacs located on either side of the Warm Springs Valley/French Valley Channel. The County has determined a need to provide continuity on Skyview Road for travelers within the French Valley community to traverse the Warm Springs Valley/French Valley Channel, and would fill that need through the development of a multipurpose pedestrian and bicyclist bridge on the County-owned easement. A new French Valley Library is anticipated to be constructed in the northwest quadrant of the pedestrian bridge in a separate project by the County. Thus, special aesthetic treatment and bridge design will be employed to complement the proposed library.

The proposed project occurs within the U.S. Geological Survey (USGS) Bachelor Mountain 7.5-minute quadrangle, in Riverside County, California (USGS 1968; Attachment A: Figures 1 through 3). The proposed project area and the Warm Springs Valley/French Valley Channel is bordered on all sides by developed land, which includes Skyview Road, housing developments, and a parcel of land currently under construction. The elevation within the proposed project area is approximately 1,360 feet above mean sea level.

The dominant vegetation communities and land cover types in the proposed project area include southern willow scrub, disturbed wetland, fresh water marsh, and disturbed habitat.

SPECIES INFORMATION

The least Bell's vireo is a small, olive-gray colored, migratory songbird that is federally and state-listed as endangered. One of four Bell's vireo subspecies, the least Bell's vireo is endemic to California and Baja California, Mexico. This highly migratory species arrives in California in mid-March and departs by late September to fly south to wintering grounds near the tip of Baja California, Mexico. This species formally bred in lowland riparian habitat, ranging from coastal southern California through the Sacramento and San Joaquin Valleys as far north as Redbluff, and other scattered locations east of the Sierra Nevada (United States Fish and Wildlife Service [USFWS] 1998; Grinnell and Miller 1986).

The least Bell's vireo is dependent upon riparian habitat during the breeding season and prefers willow-dominated woodland or scrub that typically exists along streams and rivers. Other habitat types used include *Baccharis* scrub, mixed oak/willow woodland, mesquite woodland, and elderberry scrub. Habitat characteristics that appear to be essential for vireo occupation include dense cover from 3 to 6 feet in height for nesting and foraging, and a stratified canopy providing both foraging habitat and song perches for territorial advertisement.

By the time least Bell's vireo was listed by the California Department of Fish and Wildlife (CDFW) in 1984, it had been extirpated from much of its former range and was restricted to eight counties south from Santa Barbara with just 300 pairs statewide (Unitt 2004). Declines were caused by widespread clearing of riparian habitat combined with brood parasitism by brown-headed cowbirds (*Molothrus ater*), whose increase in California was as dramatic as the species' decline. Currently, with restriction of habitat destruction, extensive cowbird trapping, and protection from the federal and state Endangered Species Acts, populations have recovered in some areas of cismontane southern California and are expanding into former ranges, with the northernmost sighting from Santa Clara County, California (Brown 1993, Kus 2002). San Diego County holds the largest breeding population of least Bell's vireo in the state, where it is a fairly common breeder in appropriate habitats, primarily in the coastal lowlands (Unitt 2004).

METHODS

The methods used to conduct a habitat assessment and focused, protocol-level least Bell's vireo surveys are presented in this section.

Habitat Assessment Methods

A qualified BBS biologist conducted a focused habitat assessment for least Bell's vireo within 500 feet of all proposed project features. The habitat assessment was conducted by assessing the vegetation communities and other parameters (e.g., species composition, height, density, disturbance type/amount) for their potential to support the least Bell's vireo. Polygons of suitable least Bell's vireo habitat were drawn by hand onto a high-resolution aerial field map, which were later screen-digitized in the office by a Geographic Information Systems (GIS) specialist using ArcGIS software.

Focused Survey Methods

Qualified BBS biologists conducted focused, protocol-level surveys for the least Bell's vireo in accordance with the current USFWS survey protocol, titled *Least Bell's Vireo Survey Guidelines* (USFWS 2001). Eight surveys were conducted at least 10 days apart during the protocol survey window of April 10 to July 31. All surveys were conducted between approximately dawn and 1100 and avoided periods of adverse weather conditions (e.g., excessively hot or cold temperatures, high winds, steady rain, dense fog, other inclement weather conditions) that would impede detection of the least Bell's vireo. Surveyors slowly walked throughout the suitable habitat within the survey area, which includes a 500-foot buffer from all proposed project features, and used visual and auditory cues to detect the least Bell's vireo. Various routes were utilized to conduct an unbiased survey of the potentially suitable habitat within the survey area, while taking care not to disturb sensitive habitat or potential nest areas. No more than approximately 3 linear kilometers (50 hectares) of suitable habitat were surveyed per day, per the protocol.

Sensitive species detections were recorded electronically using a hand-held Global Positioning Systems (GPS) device and/or by hand onto a high-resolution aerial image of the survey area, and relevant information (e.g., age, sex, number of individuals detected) was noted if least Bell's vireo were detected. In addition, numbers and locations of parasitic brown-headed cowbirds were recorded, if present, and other wildlife species observed directly or detected indirectly by sign, including scat, tracks, calls, and other evidence, were recorded.

RESULTS

The results of the habitat assessment and focused, protocol-level least Bell's vireo surveys are presented in this section.

Habitat Assessment Results

BBS biologists Erik LaCoste and Charles Vettes identified an approximate total of 3.42 acres of potentially suitable least Bell's vireo habitat within the project survey area during the habitat assessment conducted simultaneously with the first survey

on April 22, 2020 (Attachment 1: Figure 3). The potentially suitable least Bell's vireo habitat within the survey area includes southern willow scrub and disturbed wetland. These vegetation communities and their suitability for least Bell's vireo are described in more detail below.

The southern willow scrub within the survey area generally ranges in height from 10 to 25 feet, contains an open to dense canopy dominated by woody species such as red willow (*Salix laevigata*), black willow (*Salix gooddingii*), mulefat (*Baccharis salicifolia* ssp. *salicifolia*), and salt-cedar (*Tamarix ramosissima*) with an herbaceous understory dominated by broadleaved pepperweed (*Lepidium latifolium*), saltbush (*Atriplex* sp.), broad-leaved cattail (*Typha latifolia*), and tule (*Schoenoplectus acutus* var. *occidentalis*). In addition, the southern willow scrub appears to have experienced a fire in the recent past, as evident from scattered, charred willow snags throughout the survey area. The southern willow scrub provides moderate to high quality habitat for least Bell's vireo, as the majority of the suitable habitat supports a plant species composition, height, and density typically associated with the species. In addition, the suitable habitat within the survey area is contiguous with adjacent suitable habitat in the Warm Springs Valley/French Valley Channel up- and downstream of the survey area.

The disturbed wetland within the survey area generally ranges in height from approximately 2 to 10 feet, contains dense, short to moderately high vegetation, and is dominated by species such as tree tobacco (*Nicotiana glauca*), broadleaved pepperweed, salt-cedar, saltbush, broad-leaved cattail, and tule. In addition, the disturbed wetland appears to have experienced a fire in the recent past, as evident from scattered, charred willow snags throughout the survey area. The disturbed wetland provides low quality habitat for least Bell's vireo, because it is dominated by an overall low community height and species composition not typically associated with the species' preferred habitat.

Focused Survey Results

Eight focused, protocol-level surveys were conducted within the project survey area between April 22 and July 13, 2020. Surveys were conducted during appropriate weather conditions by qualified BBS biologists Darin Busby, Erik LaCoste, and Charles Vettes. Dates and survey conditions during the focused surveys are provided in Table 1, below.

Table 1. Survey Conditions

Survey #	Date	Time		Weather				Surveyor
				Temp (°F)	Wind (mph)	Clouds (% cover)	Precipitation	
1	4/22/20	Start	0740	51	1-2	0	0	E. LaCoste C. Vettes
		End	0945	67	2-4	0	0	
2	5/5/20	Start	0730	66	0-1	0	0	D. Busby C. Vettes
		End	0930	74	0-1	0	0	
3	5/18/20	Start	0735	64	3-5	20	0	D. Busby C. Vettes
		End	1000	70	3-5	30	0	
4	6/1/20	Start	0745	71	0-1	0	0	D. Busby E. LaCoste
		End	1000	80	1-2	50	0	
5	6/11/20	Start	0700	60	1-2	0	0	C. Vettes E. LaCoste
		End	1000	84	2-3	0	0	
6	6/22/20	Start	0730	59	4-6	100	0	C. Vettes E. LaCoste
		End	0930	63	2-4	0	0	
7	7/2/20	Start	0730	60	1-2	100	0	D. Busby C. Vettes
		End	0930	63	1-2	100	0	
8	7/13/20	Start	0730	68	0-1	0	0	C. Vettes E. LaCoste
		End	1000	81	1-3	0	0	

No breeding least Bell's vireo were detected during the 2020 focused, protocol-level surveys. However, a single least Bell's vireo was detected during the eighth survey conducted on July 13, 2020. The least Bell's vireo was detected within the 500-foot buffer area north of the proposed project area. The individual least Bell's vireo, which appeared to be an adult, was observed foraging and singing sporadically for approximately 25 minutes. A follow-up visit to the site was conducted on July 22, 2020, to further investigate the least Bell's vireo detected on July 13, 2020; however, the least Bell's vireo was not detected during this survey. It is likely that this individual least Bell's vireo was only using the survey area as foraging habitat. No other least Bell's vireo were detected in the survey area at any other time during surveys.

A total of 57 wildlife species were detected during the focused least Bell's vireo surveys (Attachment 2). Of these 57 species, 5 sensitive species were detected during these surveys, including least Bell's vireo; willow flycatcher (*Empidonax traillii*), a state-listed endangered species; yellow warbler (*Dendroica petechia*), a state species of special concern; yellow-breasted chat (*Icteria virens*), a state species of special concern; and Cooper's hawk (*Accipiter cooperii*), a state watch list species (Attachment 1: Figure 3). In addition, several brown-headed cowbirds, a brood parasite, were detected and recorded during each of the eight surveys. Cowbirds were detected continuously flying through and perched in the survey area. The number of individuals detected during surveys ranged from 2 to 12 with both male and female individuals present at times. It should be noted that the locations of sensitive species and brown-headed cowbirds on Figure 3 (Attachment 1) may reflect repeated detections of the same individuals from one survey to the next and are not intended to represent the quantity of individuals present.

SUMMARY

No breeding least Bell's vireo were detected during the 2020 focused, protocol-level surveys. However, a single least Bell's vireo was detected foraging within the survey area on July 13, 2020.

Please do not hesitate to contact me at darin@busbybiological.com or (858) 334-9508 or Melissa Busby at melissa@busbybiological.com or (858) 334-9507 if you have any questions.

Sincerely,

Darin Busby
Principal Biologist / Owner

ATTACHMENTS

Attachment 1: Figures
Attachment 2: Wildlife Species Detected within the Proposed Project Survey Area
Attachment 3: Representative Photographs from the Proposed Project Survey Area

REFERENCES

Brown, B.T.
1993 Bell's Vireo (*Vireo bellii*). In *The Birds of North America*, No. 35 (A. Poole, P. Stettenheim, and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.

Grinnell, J., and A.H. Miller
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2004 San Diego County Bird Atlas. San Diego Natural History Museum. San Diego, CA.

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1998 Draft Recovery Plan for the Least Bell's Vireo. U.S. Fish and Wildlife Service, Portland, OR. 139 pgs.
2001 Least Bell's Vireo Survey Guidelines.

U.S. Geological Survey (USGS)
1968 7.5-minute Bachelor Mountain Topographic Quadrangle (Photorevised 1975)

PROJECT BIOLOGIST SIGNATURE PAGE

The project biologists performing focused, protocol-level, least Bell's vireo (*Vireo bellii pusillus*) surveys for the proposed Skyview Pedestrian Bridge Project (project) were qualified to survey for this species. The undersigned project biologists certify this report to be a complete and accurate account of the findings and conclusions of surveys for least Bell's vireo conducted for the proposed project during spring 2020.

_____

Darin Busby
Principal Biologist / Owner
Busby Biological Services, Inc.

_____

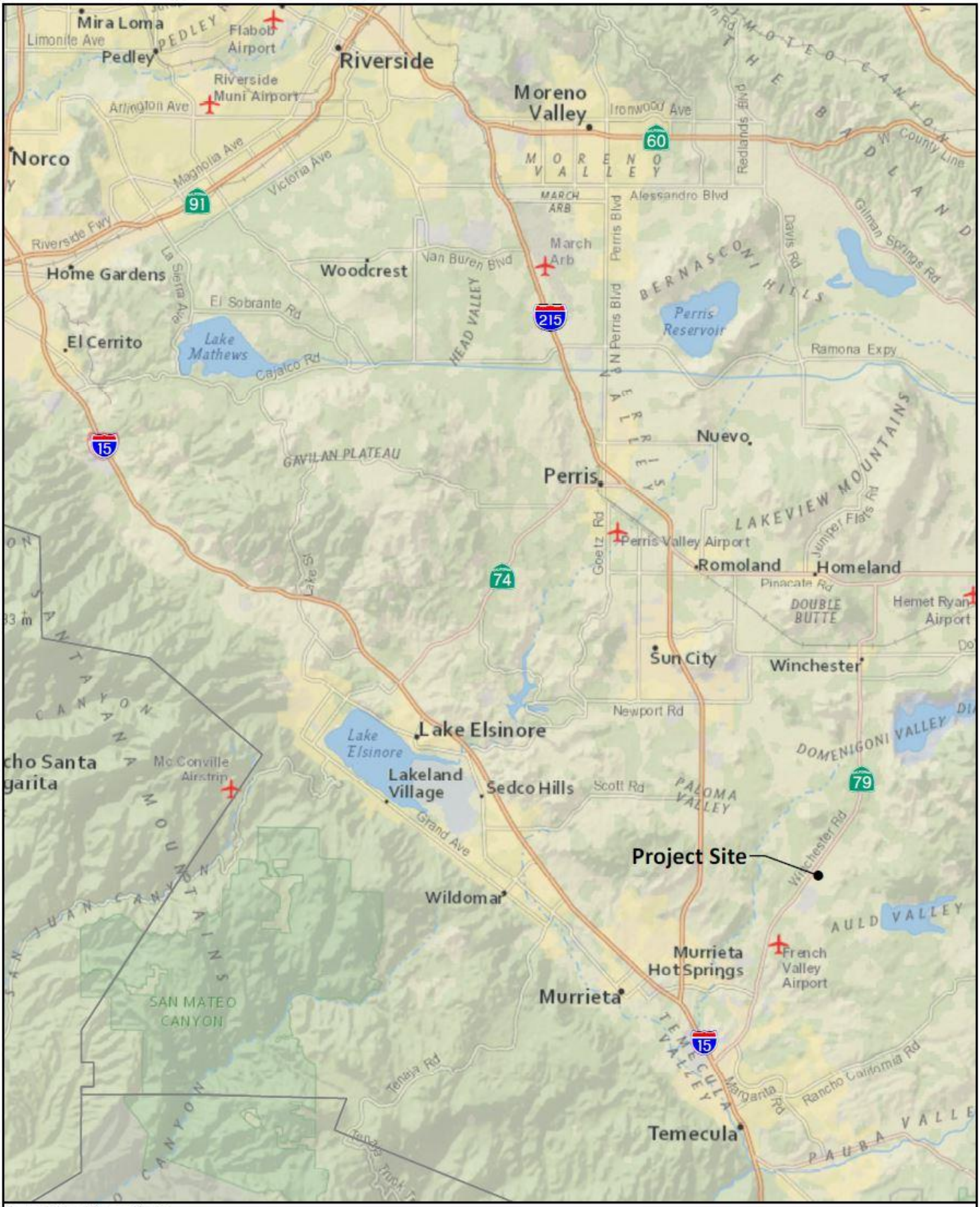
Erik LaCoste
Senior Biologist
Busby Biological Services, Inc.

_____

Charles Vettes
Senior Biologist
Busby Biological Services, Inc.

ATTACHMENT 1

FIGURES



Source: National Geographic, Esri

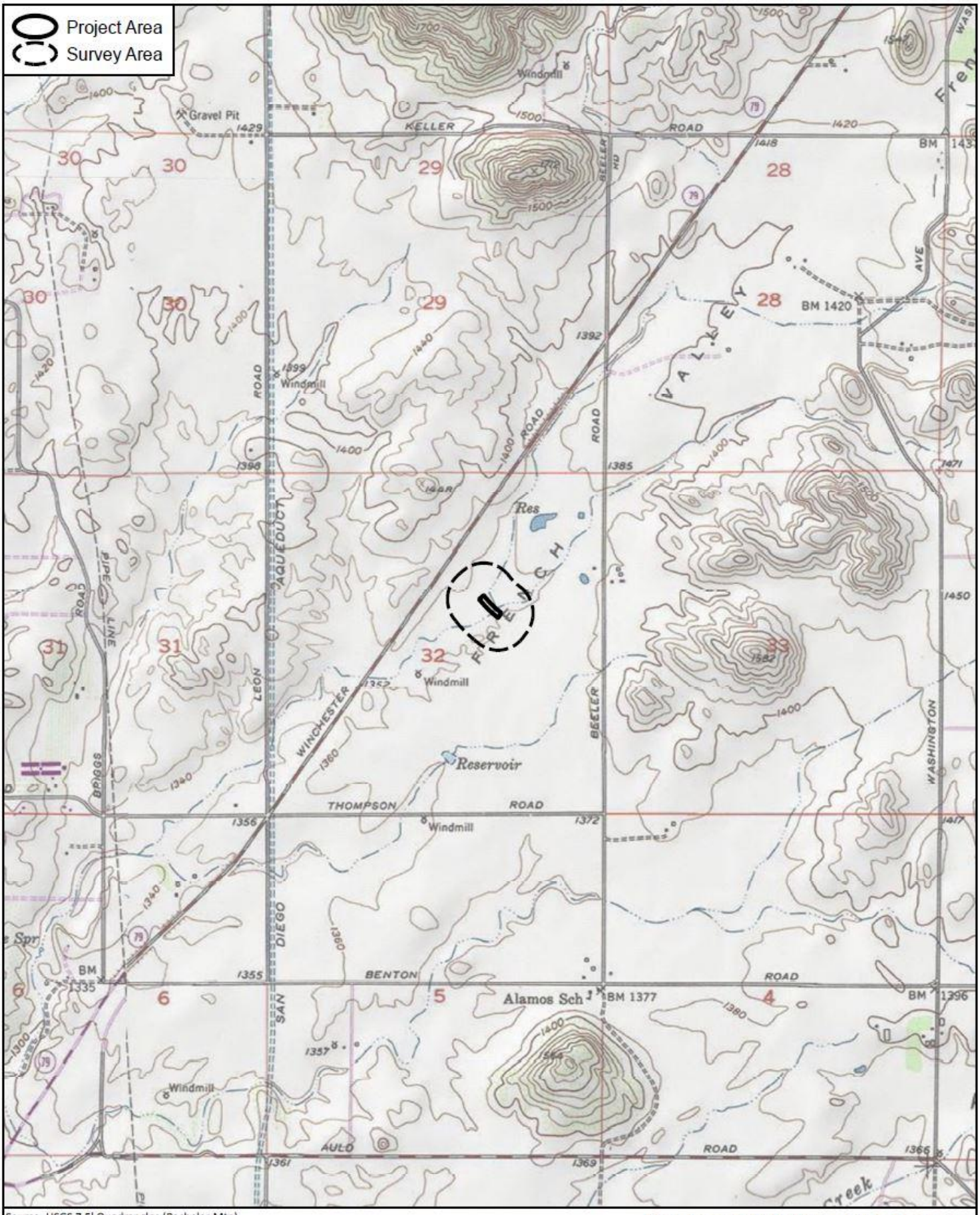
BUSBY Biological Services

N 0 2 4 Miles

Regional Location

SKYVIEW PEDESTRIAN BRIDGE PROJECT

Figure 1



Source: USGS 7.5' Quadrangles (Bachelor Mtn)

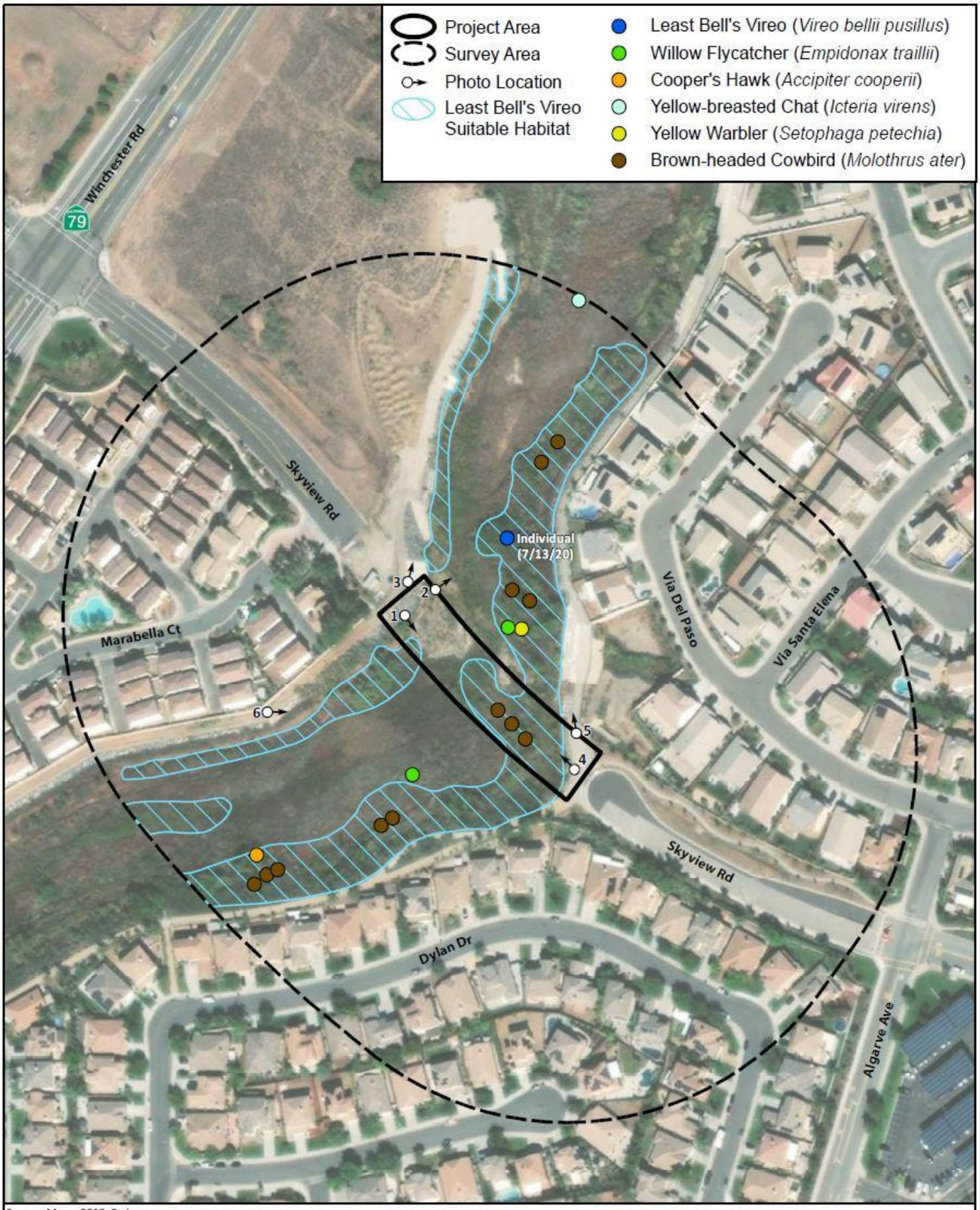
BUSBY Biological Services

N 0 1,000 2,000 Feet

Project Vicinity - USGS Topo

SKYVIEW PEDESTRIAN BRIDGE PROJECT

Figure 2



Source: Maxar 2018, Esri

BUSBY Biological Services

N

0 100 200 Feet

Least Bell's Vireo Survey Results

SKYVIEW PEDESTRIAN BRIDGE PROJECT

Figure 3

ATTACHMENT 2

WILDLIFE SPECIES DETECTED WITHIN THE PROPOSED PROJECT SURVEY AREA

Attachment 2
Wildlife Species Detected within the Proposed Project Survey Area

INVERTEBRATES			
Order	**Family**	**Scientific Name**	**Common Name**
Lepidoptera			
	Papilionidae	*Papilio rutulus*	Western Tiger Swallowtail
VERTEBRATES			
Order	**Family**	**Scientific Name**	**Common Name**
AMPHIBIANS			
Anura			
	Ranidae	*Lithobates catesbeianus*	American bullfrog
REPTILES			
Cryptodira			
	Emydidae	*Trachemys scripta elegans*	Red-eared Slider
Squamata			
	Phrynosomatidae	*Sceloporus occidentalis*	Western Fence Lizard
BIRDS			
Accipitriformes			
	Accipitridae	*Accipiter cooperii**	Cooper's Hawk
		Buteo jamaicensis	Red-tailed Hawk
Anseriformes			
	Anatidae	*Anas platyrhynchos*	Mallard
Apodiformes			
	Trochilidae	*Archilochus alexandri*	Black-chinned Hummingbird
		Calypte anna	Anna's Hummingbird
		Calypte costae	Costa's Hummingbird
		Selasphorus sasin	Allen's Hummingbird
Columbiformes			
	Columbidae	*Columba livia*	Rock Pigeon
		Streptopelia decaocto	Eurasian Collared-Dove
		Zenaida macroura	Mourning Dove
Cuculiformes			
	Cuculidae	*Geococcyx californianus*	Greater Roadrunner
Falconiformes			
	Falconidae	*Falco sparverius*	American Kestrel
Gruiformes			
	Rallidae	*Fulica americana*	American Coot
		Gallinula galeata	Common Gallinule
		Laterallus jamaicensis	Black Rail

Passeriformes			
	Aegithalidae	*Psaltriparus minimus*	Bushtit
	Cardinalidae	*Pheucticus melanocephalus*	Black-headed Grosbeak
		Piranga ludoviciana	Western Tanager
	Corvidae	*Aphelocoma californica*	California Scrub-Jay
		Corvus brachyrhynchos	American Crow
		Corvus corax	Common Raven
	Fringillidae	*Haemorhous mexicanus*	House Finch
		Spinus psaltria	Lesser Goldfinch
		Spinus tristis	American Goldfinch
	Hirundinidae	*Hirundo rustica*	Barn Swallow
		Petrochelidon pyrrhonota	Cliff Swallow
		Stelgidopteryx serripennis	Northern Rough-winged Swallow
	Icteria	*Icteria virens**	Yellow-breasted Chat
	Icteridae	*Agelaius phoeniceus*	Red-winged Blackbird
		Icterus cucullatus	Hooded Oriole
		Molothrus ater	Brown-headed Cowbird
	Mimidae	*Mimus polyglottos*	Northern Mockingbird
	Parulidae	*Cardellina pusilla*	Wilson's Warbler
		Geothlypis trichas	Common Yellowthroat
		Leiothlypis celata	Orange-crowned Warbler
		*Setophaga petechia**	Yellow Warbler
	Passerellidae	*Melospiza melodia*	Song Sparrow
		Pipilo maculatus	Spotted Towhee
	Passeridae	*Passer domesticus*	House Sparrow
	Sturnidae	*Sturnus vulgaris*	European Starling
	Troglodytidae	*Thryomanes bewickii*	Bewick's Wren
		Troglodytes aedon	House Wren
	Tyrannidae	*Empidonax difficilis*	Pacific-slope Flycatcher
		*Empidonax traillii**	Willow Flycatcher
		Empidonax wrightii	Gray Flycatcher
		Sayornis nigricans	Black Phoebe
		Sayornis saya	Say's Phoebe
		Tyrannus vociferans	Cassin's Kingbird
	Vireonidae	*Vireo gilvus*	Warbling Vireo
		*Vireo bellii pusillus**	Least Bell’s Vireo
Pelecaniformes			
	Ardeidae	*Butorides virescens*	Green Heron
Piciformes			
	Picidae	*Dryobates nuttallii*	Nuttall's Woodpecker
MAMMALS			
Lagomorpha			
	Leporidae	*Sylvilagus audubonii*	Desert Cottontail

*special status species

ATTACHMENT 3

REPRESENTATIVE PHOTOGRAPHS FROM THE PROJECT SURVEY AREA

REPRESENTATIVE PHOTOS

	Photograph 1. View across the Warm Springs Valley/French Valley Channel showing proposed project area and riparian habitat (taken 6/1/2020; facing southeast).
	Photograph 2. View across the Warm Springs Valley/French Valley Channel north of proposed project area (taken 6/1/2020; facing northeast).
	Photograph 3. View of riparian habitat upstream from the proposed project area (taken 6/1/2020; facing north).

	Photograph 4. View across the Warm Springs Valley/French Valley Channel showing proposed project area and riparian habitat (taken 6/1/2020; facing northwest).
	Photograph 5. View of riparian habitat upstream from the proposed project area (taken 6/1/2020; facing north).
	Photograph 6. View across the Warm Springs Valley/French Valley Channel showing proposed project area and riparian habitat (taken 6/1/2020; facing east).

BUSBY
Biological Services

October 2, 2020

Ms. Stacey Love
Recovery Permit Coordinator
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

RE: 2020 Southwestern Willow Flycatcher Survey Summary Report for the Proposed Skyview Pedestrian Bridge Project, Riverside County, California

Ms. Love:

This letter report summarizes the results of the focused, protocol-level, presence/absence surveys for the federally and state-listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*) conducted in 2020 for the proposed Skyview Pedestrian Bridge project (project). Busby Biological Services, Inc. (BBS) was contracted by POWER Engineers, Inc. to conduct these surveys on behalf of the County of Riverside (County) to determine the presence/absence of southwestern willow flycatcher within and adjacent to the proposed project area.

PROJECT INFORMATION

The proposed project includes the construction of a new pedestrian bridge across the Warm Springs Valley/French Valley Channel, approximately 800 feet east of Highway 79. Currently, there is an undeveloped, County-owned easement at that location, with cul-de-sacs located on either side of the Warm Springs Valley/French Valley Channel. The County has determined a need to provide continuity on Skyview Road for travelers within the French Valley community to traverse the Warm Springs Valley/French Valley Channel, and would fill that need through the development of a multipurpose pedestrian and bicyclist bridge on the County-owned easement. A new French Valley Library is anticipated to be constructed in the northwest quadrant of the pedestrian bridge in a separate project by the County. Thus, special aesthetic treatment and bridge design will be employed to complement the proposed library.

The proposed project occurs within the U.S. Geological Survey (USGS) Bachelor Mountain 7.5-minute quadrangle, in Riverside County, California (USGS 1968; Attachment A: Figures 1 through 3). The proposed project area and the Warm Springs Valley/French Valley Channel is bordered on all sides by developed land, which includes Skyview Road, housing developments, and a parcel of land currently under construction. The elevation within the proposed project area is approximately 1,360 feet above mean sea level.

The dominant vegetation communities and land cover types in the proposed project area include southern willow scrub, disturbed wetland, fresh water marsh, and disturbed habitat.

SPECIES INFORMATION

The southwestern willow flycatcher is a small, olive-colored, migratory songbird that is federally and state-listed as endangered. One of four subspecies of willow flycatcher (*Empidonax traillii*), it is distinguished by breeding distribution, song, call, and plumage. The southwestern willow flycatcher is a neotropic migrant that is endemic to the Americas and is a summer breeding resident in the southwestern U.S., specifically within Arizona, New Mexico, southern California, southern portions of Nevada and Utah, southwestern Colorado, far western Texas, and extreme northwestern Mexico (U.S. Fish and Wildlife Service [USFWS] 2002). It is the only subspecies of willow flycatcher that is known to breed in southern California, ranging from Kern County to San Diego County. This species arrives on breeding territories by late April to early May and migrates southward again to wintering areas in southern Mexico, Central America, and northern South America in August and September. Two additional subspecies of willow flycatcher (e.g., *E. t. brewsteri* and *E. t. adastus*) migrate through southern California in the spring and fall to and from their breeding grounds in northern California.

The southwestern willow flycatcher typically breeds in patchy to dense, well-developed riparian woodlands that occur along streams, rivers, lakes, or other wetlands, that are below 8,000 feet in elevation, and provide surface water and/or saturated soil during mid-summer (Sedgwick 2000; Sogge et al. 1997; USFWS 2002). Typical breeding habitat for southwestern willow flycatcher is composed of native riparian plant species such as willows (*Salix* spp.) and mule fat (*Baccharis salicifolia*) in patches at least 2 acres in size or in linear-shaped habitats at least 10 meters (33 feet) wide (Sogge et al. 1997). However, the species has also been observed successfully breeding in riparian communities dominated by extensive patches of invasive, non-native species such as tamarisk (*Tamarix ramosissima*) and Russian olive (*Eleagnus angustifolia*, USFWS 2002).

Once a common species in southern California, the southwestern willow flycatcher population collapsed in the early 20th century from the combined effects of habitat loss and nest parasitism by brown-headed cowbird (*Molothrus ater*; Craig and Williams 1998; Garrett and Dunn 1981; Sedgwick 2000; Unitt 2004; USFWS 2002). The cowbird is an obligate brood parasite that lays its eggs in the nests of over 200 different bird species, often causing death to some or all of the host species eggs and nestlings (Eastzer et al. 1980).

As of 2003, the southwestern willow flycatcher bred at 75 known sites in southern California within 18 drainages from San Diego to Santa Barbara and Kern counties and the Owens Valley. Prominent locations include the San Luis Rey, Santa Ana,

Santa Ynez, Owens, and Kern rivers, which supported approximately 70 percent of known territories (Sogge et. al. 2003). As of 2004, nearly half of the estimated 200 breeding pairs in southern California occurred in San Diego County, primarily along the upper San Luis Rey River (Unitt 2004).

METHODS

The methods used to conduct a habitat assessment and focused, protocol-level southwestern willow flycatcher surveys are presented in this section.

Habitat Assessment Methods

A qualified BBS biologist conducted a focused habitat assessment for southwestern willow flycatcher within 500 feet of all proposed project features. The habitat assessment was conducted by assessing the vegetation communities and other parameters (e.g., species composition, height, density, disturbance type/amount) for their potential to support the southwestern willow flycatcher. Polygons of suitable southwestern willow flycatcher habitat were drawn by hand onto a high-resolution aerial field map, which were later screen-digitized in the office by a Geographic Information Systems (GIS) specialist using ArcGIS software.

Focused Survey Methods

Focused, protocol-level surveys for the southwestern willow flycatcher were conducted by a permitted biologist in accordance with the current USFWS-accepted survey protocol, titled *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (Sogge et al. 2010). The survey protocol entails intensive surveys of suitable habitat as well as detailed datasheets documenting detections, habitat, and other information about the southwestern willow flycatcher.

Five surveys were conducted during the three survey periods outlined in the protocol, including one survey during the first period (May 15 to May 31), two surveys during the second period (June 1 to June 24), and two surveys during the third period (June 25 to July 17). The surveys were conducted in suitable habitat within the survey area, which includes a 500-foot buffer from all proposed project features. All surveys were conducted between approximately 0530 and 1000 and avoided periods of adverse weather conditions (e.g., excessively hot or cold temperatures, high winds, steady rain, dense fog, other inclement weather conditions) that would impede detection of the southwestern willow flycatcher.

The permitted biologist slowly walked throughout the suitable habitat within the survey area and used visual and auditory cues to detect the southwestern willow flycatcher. Various routes were utilized to conduct an unbiased survey of the potentially suitable habitat within the survey area, while taking care not to disturb sensitive habitat or potential nest areas. Pre-recorded southwestern willow flycatcher vocalization playbacks were used only to elicit initial calls from the southwestern

willow flycatcher but were not used frequently or to elicit further behaviors. Pre-recorded vocalizations were played for a period of 10 to 15 seconds and were generally repeated approximately every 70 to 100 feet within the surveyed habitat.

Sensitive species detections were recorded electronically using a hand-held Global Positioning System (GPS) device and/or by hand onto a high-resolution aerial image of the survey area, and relevant information about the detection (e.g., age, sex, number of individuals detected) was noted when necessary. In addition, numbers and locations of parasitic brown-headed cowbirds were recorded, and other wildlife species observed directly or detected indirectly by sign, including scat, tracks, calls, and other evidence, were recorded.

RESULTS

The results of the habitat assessment and focused, protocol-level southwestern willow flycatcher surveys are presented in this section.

Habitat Assessment Results

BBS biologists Erik LaCoste and Charles Vettes identified an approximate total of 3.42 acres of potentially suitable southwestern willow flycatcher habitat within the project survey area during the habitat assessment conducted on April 22, 2020 (Attachment 1: Figure 3). The potentially suitable southwestern willow flycatcher habitat within the survey area includes southern willow scrub and disturbed wetland. These vegetation communities and their suitability for southwestern willow flycatcher are described in more detail below.

The southern willow scrub within the survey area generally ranges in height from 10 to 25 feet, contains an open to dense canopy dominated by woody species such as red willow (*Salix laevigata*), black willow (*Salix gooddingii*), mulefat (*Baccharis salicifolia* ssp. *salicifolia*), and salt-cedar (*Tamarix ramosissima*) with an herbaceous understory dominated by broadleaved pepperweed (*Lepidium latifolium*), saltbush (*Atriplex* sp.), broad-leaved cattail (*Typha latifolia*), and tule (*Schoenoplectus acutus* var. *occidentalis*). In addition, the southern willow scrub appears to have experienced a fire in the recent past, as evident from scattered, charred willow snags throughout the survey area. The southern willow scrub provides moderate quality habitat for southwestern willow flycatcher, as the majority of the suitable habitat supports a plant species composition, height, and density typically associated with the species, but in areas lacks the necessary width preferred for establishing a nesting territory. In addition, the suitable habitat within the survey area is contiguous with adjacent suitable habitat in the Warm Springs Valley/French Valley Channel up- and downstream of the survey area.

The disturbed wetland within the survey area generally ranges in height from 2 to 10 feet, contains dense, short to moderately high vegetation, and is dominated by species such as tree tobacco (*Nicotiana glauca*), broadleaved pepperweed, salt-

cedar, saltbush, broad-leaved cattail, and tule. In addition, the disturbed wetland appears to have experienced a fire in the recent past, as evident from scattered, charred willow snags throughout the survey area. The disturbed wetland provides low quality habitat for southwestern willow flycatcher, because it contains an overall low community height and species composition not typically associated with the species' preferred habitat.

Focused Survey Results

Five focused, protocol-level surveys were conducted within the project survey area between May 18, and July 13, 2020. Surveys were conducted during appropriate weather conditions by USFWS permitted BBS biologists Erik LaCoste (TE-027736-6) and Charles Vettes (TE-20160B-2), and assisted by BBS biologist Darin Busby. Dates and survey conditions during the focused surveys are provided in Table 1, below.

Table 1. Survey Conditions

Survey #	Date	Time		Weather				Surveyor
				Temp (°F)	Wind (mph)	Clouds (% cover)	Precip	
1	5/18/20	Start	0735	64	3-5	20	0	C. Vettes
		End	1005	70	3-5	30	0	D. Busby
2	6/1/20	Start	0745	71	0-1	100	0	E. LaCoste
		End	1000	80	1-2	100	0	D. Busby
3	6/11/20	Start	0700	60	1-2	0	0	E. LaCoste
		End	1000	84	2-3	0	0	C. Vettes
4	7/2/20	Start	0730	60	1-2	100	0	C. Vettes
		End	0930	63	1-2	100	0	D. Busby
5	7/13/20	Start	0730	68	0-1	0	0	E. LaCoste
		End	1000	81	1-3	0	0	C. Vettes

No breeding southwestern willow flycatchers were detected during the 2020 focused, protocol-level surveys. However, two willow flycatchers were detected during the second survey on June 1, 2020 (Attachment 1: Figure 3). Each willow flycatcher was heard responding to a call playback. The willow flycatcher sightings occurred early in the second survey window, the time of year when southwestern willow flycatchers are establishing breeding territories but also the time of year when subspecies *E.t. brewsterii* or *E.t. edastus* may still be present and singing while migrating through southern California (Sogge 2010). Because no willow flycatchers were detected during the subsequent three surveys, the two flycatchers detected during the second survey were likely one of the other migrant willow flycatcher subspecies and not breeding southwestern willow flycatcher. No other willow flycatchers were detected within or adjacent to the survey area during the 2020 focused, protocol-level presence/absence surveys. A USFWS Willow Flycatcher Survey and Detection Form containing the results of the focused surveys is included as Attachment 3.

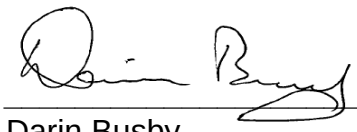
A total of 57 wildlife species were detected during the focused southwestern willow flycatcher surveys (Attachment 2). Of these 57 species, four sensitive species (in addition to willow flycatcher) were detected during these surveys, including least Bell's vireo (*Vireo bellii pusillus*), a federally and state-listed endangered species; yellow warbler (*Dendroica petechia*), a state species of special concern; yellow-breasted chat (*Icteria virens*), a state species of special concern; and Cooper's hawk (*Accipiter cooperii*), a state watch list species (Attachment 1: Figure 3). In addition, several brown-headed cowbirds, a brood parasite, were detected and recorded during each of the five surveys. Cowbirds were continuously detected flying through and perched in the survey area. The number of individuals detected during surveys ranged from 2 to 12 with both male and female individuals present at times. It should be noted that the locations of sensitive species and brown-headed cowbirds on Figure 3 (Attachment 1) may reflect repeated detections of the same individuals from one survey to the next and are not intended to represent the quantity of individuals present.

SUMMARY

No breeding southwestern willow flycatchers were detected during the 2020 focused, protocol-level surveys. Two migrant willow flycatchers were detected during the second survey conducted on June 1, 2020. However, these individuals were detected early in the 2020 breeding season and were not detected during subsequent surveys. Therefore, they were likely migrant willow flycatchers and not breeding southwestern willow flycatchers.

Please do not hesitate to contact me at darin@busbybiological.com or (858) 334-9508 or Melissa Busby at melissa@busbybiological.com or (858) 334-9507 if you have any questions.

Sincerely,



Darin Busby
Principal Biologist / Owner
Busby Biological Services, Inc.

ATTACHMENTS

Attachment 1: Figures
Attachment 2: Wildlife Species Detected within the Proposed Project Survey Area
Attachment 3: Representative Photographs from the Proposed Project Survey Area
Attachment 4: Willow Flycatcher Survey and Detection Form

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1968 7.5-minute Bachelor Mountain Topographic Quadrangle (Photo revised 1997).

PROJECT BIOLOGIST SIGNATURE PAGE

The biologists performing focused, protocol-level, southwestern willow flycatcher (*Empidonax traillii extimus*) surveys for the proposed Skyview Pedestrian Bridge Project (project) were permitted to survey for this species. The undersigned permitted biologists certify this report to be a complete and accurate account of the findings and conclusions of surveys for southwestern willow flycatcher conducted for the proposed project during spring 2020.

_____

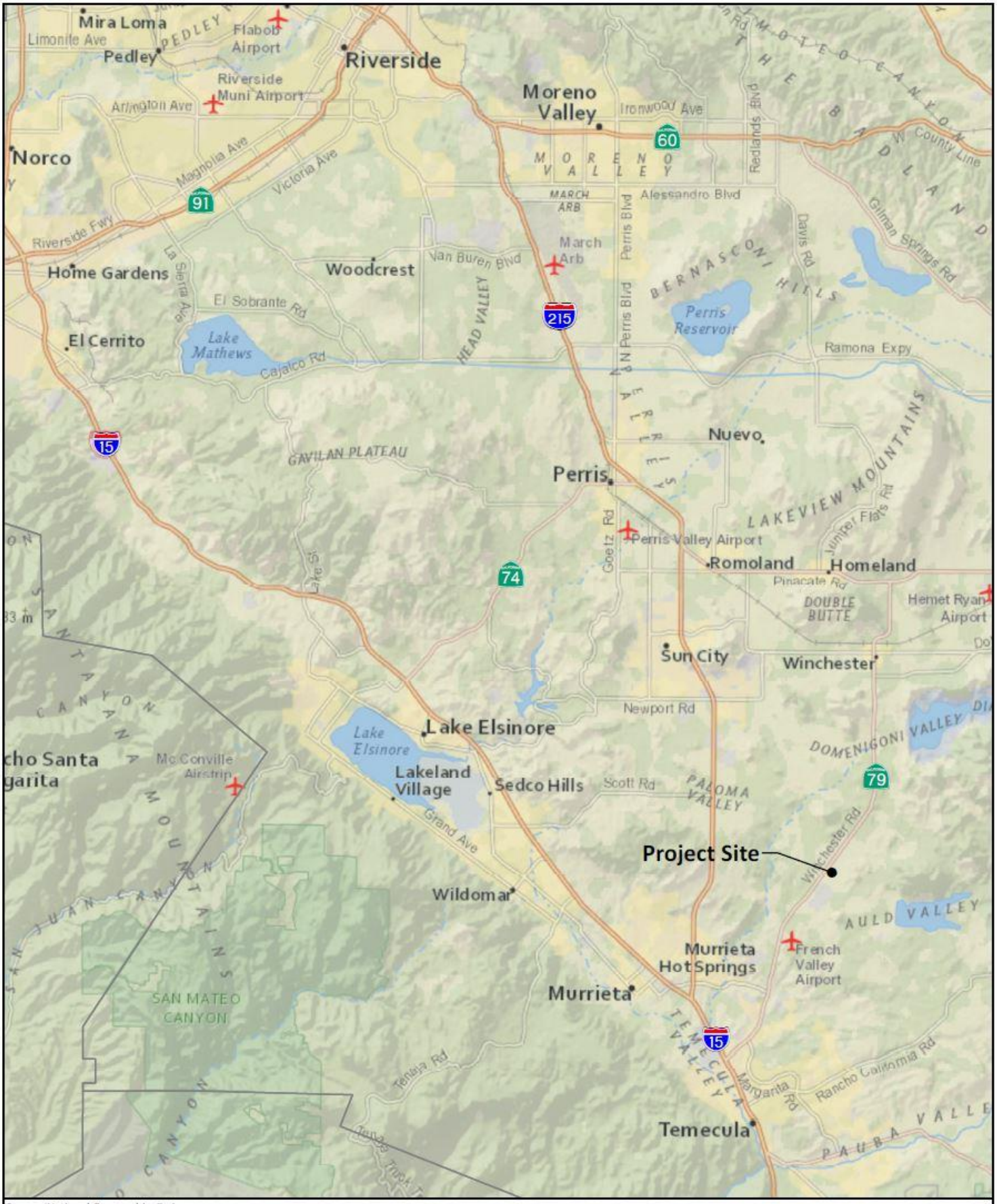
Erik LaCoste
Senior Biologist
Busby Biological Services, Inc.
ESA Permit Number TE-027736-6

_____

Charles Vettes
Senior Biologist
Busby Biological Services, Inc.
ESA Permit Number TE-20160B-2

ATTACHMENT 1

FIGURES



Source: National Geographic, Esri

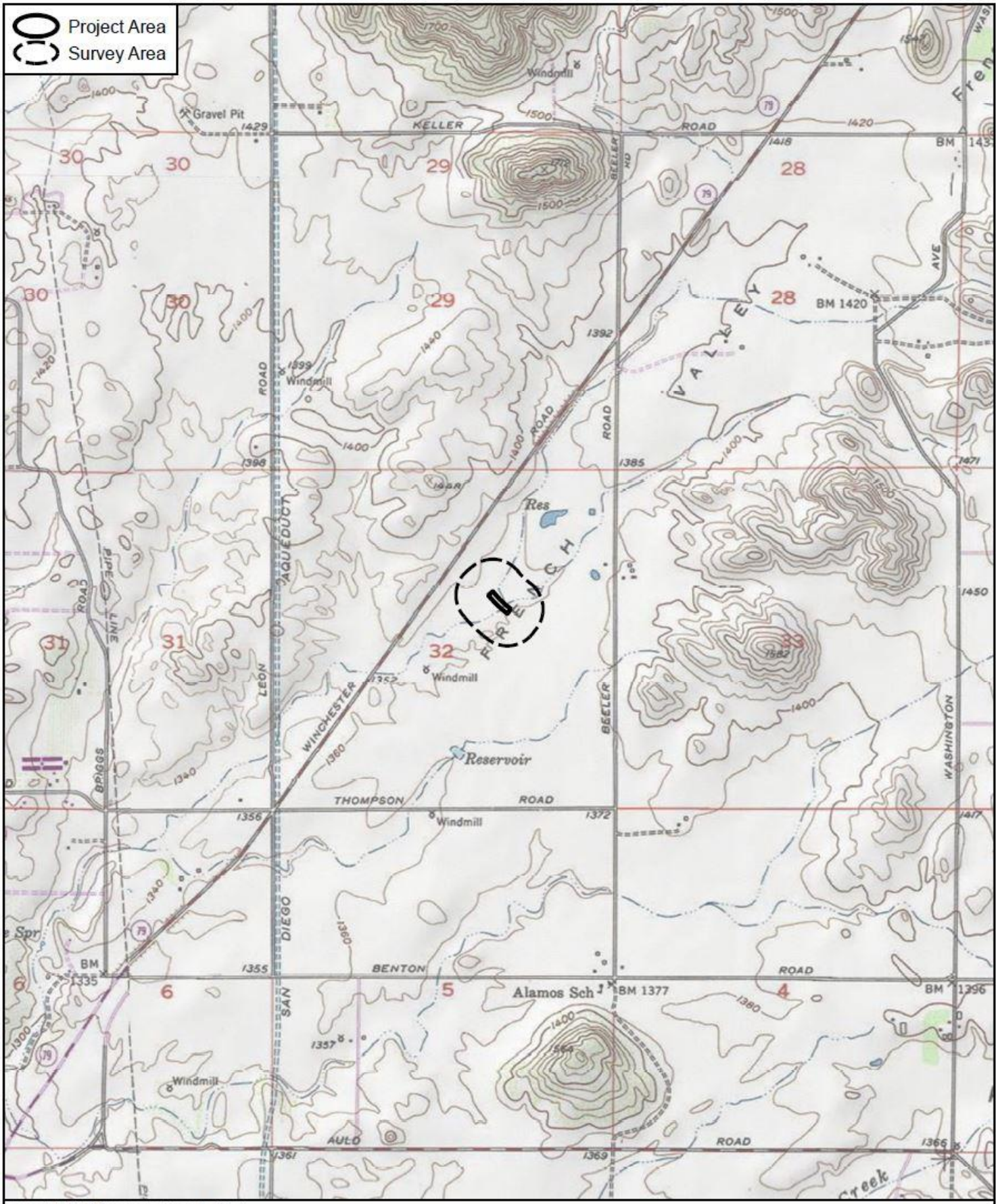
BUSBY Biological Services

N 0 2 4 Miles

Regional Location

SKYVIEW PEDESTRIAN BRIDGE PROJECT

Figure 1



Source: USGS 7.5' Quadrangles (Bachelor Mtn)

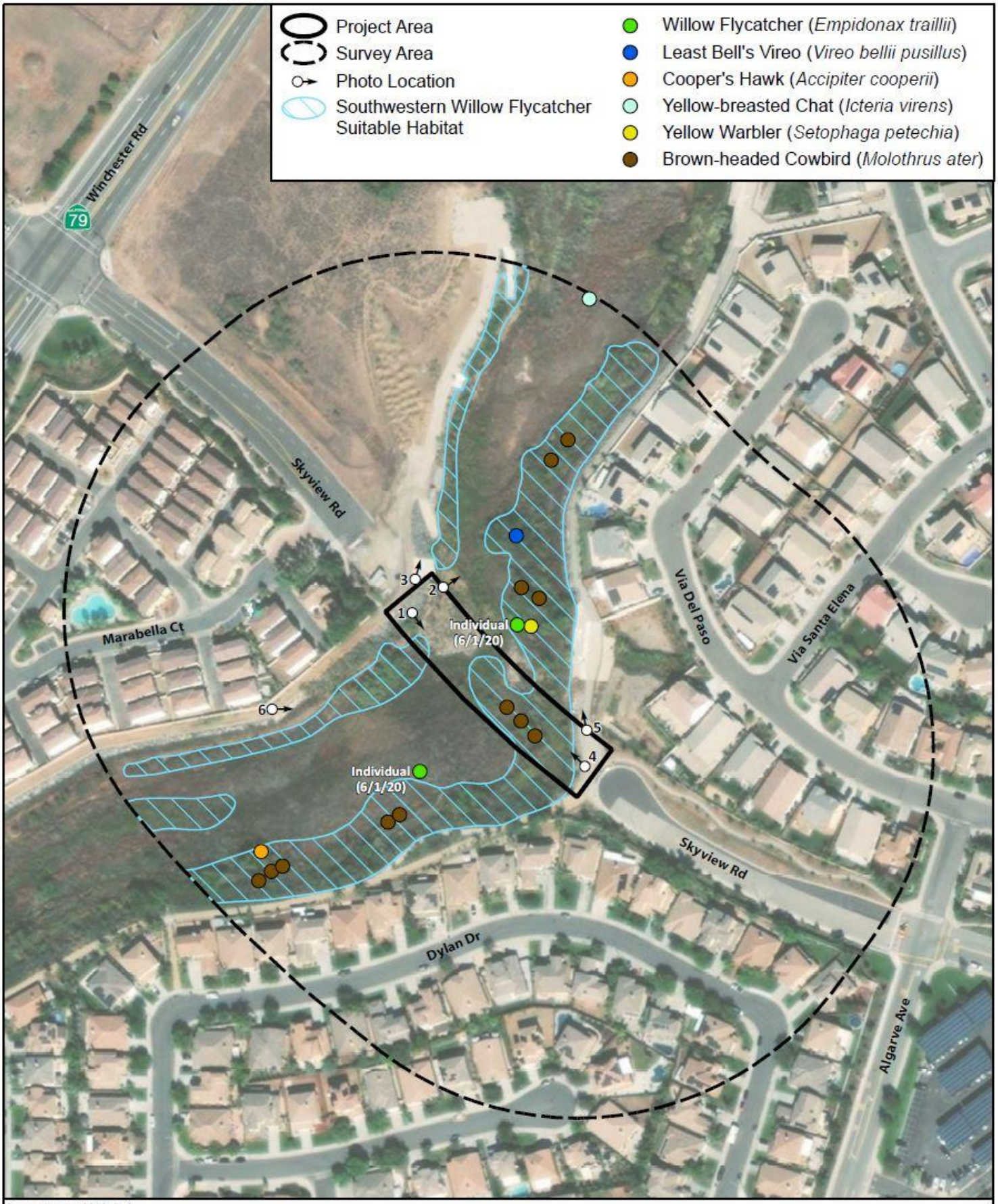
BUSBY Biological Services

N 0 1,000 2,000 Feet

Project Vicinity - USGS Topo

SKYVIEW PEDESTRIAN BRIDGE PROJECT

Figure 2



Source: Maxar 2018, Esri

Southwestern Willow Flycatcher Survey Results

SKYVIEW PEDESTRIAN BRIDGE PROJECT

BUSBY Biological Services

N

0 100 200 Feet

Figure 3

ATTACHMENT 2

WILDLIFE SPECIES DETECTED WITHIN THE PROPOSED PROJECT SURVEY AREA

Attachment 2
Wildlife Species Detected within the Proposed Project Survey Area

INVERTEBRATES			
Order	**Family**	**Scientific Name**	**Common Name**
Lepidoptera			
	Papilionidae	*Papilio rutulus*	Western Tiger Swallowtail
VERTEBRATES			
Order	**Family**	**Scientific Name**	**Common Name**
AMPHIBIANS			
Anura			
	Ranidae	*Lithobates catesbeianus*	American bullfrog
REPTILES			
Cryptodira			
	Emydidae	*Trachemys scripta elegans*	Red-eared Slider
Squamata			
	Phrynosomatidae	*Sceloporus occidentalis*	Western Fence Lizard
BIRDS			
Accipitriformes			
	Accipitridae	*Accipiter cooperii**	Cooper's Hawk
		Buteo jamaicensis	Red-tailed Hawk
Anseriformes			
	Anatidae	*Anas platyrhynchos*	Mallard
Apodiformes			
	Trochilidae	*Archilochus alexandri*	Black-chinned Hummingbird
		Calypte anna	Anna's Hummingbird
		Calypte costae	Costa's Hummingbird
		Selasphorus sasin	Allen's Hummingbird
Columbiformes			
	Columbidae	*Columba livia*	Rock Pigeon
		Streptopelia decaocto	Eurasian Collared-Dove
		Zenaida macroura	Mourning Dove
Cuculiformes			
	Cuculidae	*Geococcyx californianus*	Greater Roadrunner
Falconiformes			
	Falconidae	*Falco sparverius*	American Kestrel
Gruiformes			
	Rallidae	*Fulica americana*	American Coot
		Gallinula galeata	Common Gallinule
		Laterallus jamaicensis	Black Rail
Passeriformes			
	Aegithalidae	*Psaltriparus minimus*	Bushtit
	Cardinalidae	*Pheucticus melanocephalus*	Black-headed Grosbeak
		Piranga ludoviciana	Western Tanager

	Corvidae	*Aphelocoma californica*	California Scrub-Jay
		Corvus brachyrhynchos	American Crow
		Corvus corax	Common Raven
	Fringillidae	*Haemorhous mexicanus*	House Finch
		Spinus psaltria	Lesser Goldfinch
		Spinus tristis	American Goldfinch
	Hirundinidae	*Hirundo rustica*	Barn Swallow
		Petrochelidon pyrrhonota	Cliff Swallow
		Stelgidopteryx serripennis	Northern Rough-winged Swallow
	Icteria	*Icteria virens**	Yellow-breasted Chat
	Icteridae	*Agelaius phoeniceus*	Red-winged Blackbird
		Icterus cucullatus	Hooded Oriole
		Molothrus ater	Brown-headed Cowbird
	Mimidae	*Mimus polyglottos*	Northern Mockingbird
	Parulidae	*Cardellina pusilla*	Wilson's Warbler
		Geothlypis trichas	Common Yellowthroat
		Leiothlypis celata	Orange-crowned Warbler
		*Setophaga petechia**	Yellow Warbler
	Passerellidae	*Melospiza melodia*	Song Sparrow
		Pipilo maculatus	Spotted Towhee
	Passeridae	*Passer domesticus*	House Sparrow
	Sturnidae	*Sturnus vulgaris*	European Starling
	Troglodytidae	*Thryomanes bewickii*	Bewick's Wren
		Troglodytes aedon	House Wren
	Tyrannidae	*Empidonax difficilis*	Pacific-slope Flycatcher
		*Empidonax traillii**	Willow Flycatcher
		Empidonax wrightii	Gray Flycatcher
		Sayornis nigricans	Black Phoebe
		Sayornis saya	Say's Phoebe
		Tyrannus vociferans	Cassin's Kingbird
	Vireonidae	*Vireo gilvus*	Warbling Vireo
		*Vireo bellii pusillus**	Least Bell’s Vireo
Pelecaniformes			
	Ardeidae	*Butorides virescens*	Green Heron
Piciformes			
	Picidae	*Dryobates nuttallii*	Nuttall's Woodpecker
MAMMALS			
Lagomorpha			
	Leporidae	*Sylvilagus audubonii*	Desert Cottontail

*special status species

ATTACHMENT 3

REPRESENTATIVE PHOTOGRAPHS FROM THE PROPOSED PROJECT SURVEY AREA

REPRESENTATIVE PHOTOS

	Photograph 1. View across the Warm Springs Valley/French Valley Channel showing proposed project area and riparian habitat (taken 6/1/2020; facing southeast).
	Photograph 2. View across the Warm Springs Valley/French Valley Channel north of proposed project area (taken 6/1/2020; facing northeast).
	Photograph 3. View of riparian habitat upstream from the proposed project area (taken 6/1/2020; facing north).

	Photograph 4. View across the Warm Springs Valley/French Valley Channel showing proposed project area and riparian habitat (taken 6/1/2020; facing northwest).
	Photograph 5. View of riparian habitat upstream from the proposed project area (taken 6/1/2020; facing north).
	Photograph 6. View across the Warm Springs Valley/French Valley Channel showing proposed project area and riparian habitat (taken 6/1/2020; facing east).

ATTACHMENT 4

WILLOW FLYCATCHER SURVEY AND DETECTION FORM

Appendix 1. Willow Flycatcher Survey and Detection Form

Always check the U.S. Fish and Wildlife Service Arizona Ecological Services Field Office web site (http://www.fws.gov/southwest/es/arizona/) for the most up-to-date version.

Willow Flycatcher (WIFL) Survey and Detection Form (revised April 2010)

Site Name Skyview Pedestrian Bridge Project State CA County Riverside
USGS Quad Name Bachelor Mountain Elevation 475 (meters)
Creek, River, Wetland, or Lake Name Warm Springs Valley/French Valley Channel
Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? *Yes* ✓ *No* ___

Survey Coordinates: Start: E 490105.4 N 3718700.6 UTM Datum ___ (See instructions)
Stop: E 489685.7 N 3718500.6 UTM Zone 11
If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.
** ***Fill in additional site information on back of this page*** **

Survey # / Observer(s) (Full Name)	Date (m/d/y) Survey time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N. If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, *Diorhabda* spp.]). If *Diorhabda* found, contact USFWS and State WIFL coordinator	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s) Charles Vettes Darin Busby	Date 5/18/20 Start 0735 Stop 1005 Total hrs 3	0	0	0	0	N/A				
Survey # 2 Observer(s) Erik LaCoste Darin Busby	Date 6/1/20 Start 0745 Stop 1000 Total hrs 2.25	2	0	0	0	2 indiviuals detected. No nesting behavior. Both resonded to call play-back.	# Birds 1 1	Sex M M	UTM E 490070.7 490024.9	UTM N 3718600.6 3718530.7
Survey # 3 Observer(s) Erik LaCoste Charles Vettes	Date 6/11/20 Start 0700 Stop 1000 Total hrs 3	0	0	0	0	N/A				
Survey # 4 Observer(s) Charles Vettes Darin Busby	Date 7/2/20 Start 0730 Stop 0930 Total hrs 2	0	0	0	0	N/A				
Survey # 5 Observer(s) Erik LaCoste Charles Vettes	Date 7/13/20 Start 0730 Stop 1000 Total hrs 2.5	0	0	0	0	N/A				

Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total Survey Hrs	Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any Willow Flycatchers color-banded? Yes ___ No ✓ If yes, report color combination(s) in the comments section on back of form and report to USFWS.
	0	0	0	0	

Reporting Individual Erik LaCoste Date Report Completed August 2020
US Fish and Wildlife Service Permit # 027736-6 State Wildlife Agency Permit # SC-9735
Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Erik LaCoste Phone # 760-500-8802
Affiliation Busby Biological Services, Inc. E-mail erik@busbybiological.com
Site Name Date Report Completed 8/10/20
Was this site surveyed in a previous year? Yes ___ No ___ Unknown ✓
Did you verify that this site name is consistent with that used in previous years? Yes ___ No ___ Not Applicable ✓
If site name is different, what name(s) was used in the past? N/A
If site was surveyed last year, did you survey the same general area this year? Yes ___ No ___ If no, summarize below.
Did you survey the same general area during each visit to this site this year? Yes ___ No ___ If no, summarize below.

Management Authority for Survey Area: Federal ___ Municipal/County ✓ State ___ Tribal ___ Private ___
Name of Management Entity or Owner (e.g., Tonto National Forest) County of Riverside

Length of area surveyed: 0.305 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

___ Native broadleaf plants (entirely or almost entirely, > 90% native)

✓ Mixed native and exotic plants (mostly native, 50 - 90% native)

___ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)

___ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific names.
Salix lasiolopsis, Baccharis salicifolia, Salix gooddingii

Average height of canopy (Do not include a range): 5 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections; 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests; 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features. Attach additional sheets if necessary.

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)

Attach additional sheets if necessary

APPENDIX H – Site Photographs

Photo 1: Cul-de-sac on Skyview Road near French Valley Creek, facing west (Taken July 2019).

Photo 2: Photo representative of the willow scrub riparian habitat (Taken July 2019).

Photo 3: Representative of the alkali marsh habitat present in the Project area (Taken July 2019).

Photo 4: Representative of the emergent wetland habitat, comprised of dense cattail. Notice the riparian willows and alkali marsh (Taken July 2019).

Photo 5: Representative of the slope protection in place separating French Valley Creek from nearby urban development (Taken July 2019).