

Skyview Road Pedestrian Bridge Project

MSHCP Consistency Analysis

Riverside County
California



Discussion of Consistency with MSHCP Requirements



December 2022

MSHCP Consistency Analysis

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Acronyms

| | |
|---------|---|
| Act | Endangered Species Act |
| APN | Assessor's Parcel Number |
| BMP | Best Management Practices |
| CDFG | California Department of Fish and Game |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CNPS | California Native Plant Society |
| County | County of Riverside |
| CWA | Clean Water Act |
| DBESP | Determination of Biologically Equivalent or Superior Preservation |
| ESA | Environmentally Sensitive Area |
| HMMP | Habitat Mitigation and Monitoring Plan |
| LBVI | Least Bell's Vireo |
| MSHCP | Western Riverside County Multiple Species Habitat Conservation Plan |
| OHWM | Ordinary High Water Mark |
| PQP | Public or Quasi-Public |
| Project | Skyview Road Pedestrian Bridge Project |
| RCA | Western Riverside County Regional Conservation Authority |
| ROW | Right-of-way |
| RWQCB | Regional Water Quality Control Board |
| SWFL | Southwestern Willow Flycatcher |
| U.S. | United States |
| USACE | United States Army Corps of Engineers |
| USFWS | United States Fish and Wildlife Service |
| USGS | United States Geological Survey |
| UWIG | Urban Wildlands Interface Guidelines |
| WOS | Waters of the State |
| WOUS | Waters of the United States |
| YBCU | Yellow-billed Cuckoo |

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1 EXECUTIVE SUMMARY

The County of Riverside (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 (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 report provides the consistency analysis for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Review for the Skyview Road Pedestrian Bridge Project.

Literature research and habitat assessments were conducted to assess the sensitive biological resources present within the Project area that potentially could be impacted by the Project activities. French Valley Creek contains emergent wetlands, alkali salt marsh, and willow scrub riparian habitat, which are MSHCP riparian/riverine features. The Project will result in impacts to emergent wetlands consisting of approximately 0.177 acres of temporary impacts due to construction access, 0.007 acres of permanent impacts due to the installation of bridge piers, and 0.152 acres of shade impacts due to the new bridge spanning the channel. 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. Approximately 0.179 acres of the temporary impacts described would occur on conservation easement land. In addition to impacts to MSHCP riparian/riverine features, the Project would have approximately 0.255 acres of permanent impacts and 4.250 acres of temporary impacts to developed land.

The Project area is located within the Western Riverside County MSHCP species survey area, and as such, a burrowing owl survey, Narrow Endemic Plant survey, and Criteria Area Species survey were required by the MSHCP. Two Criteria Area Species, Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*) and smooth tarplant (*Centromadia pungens ssp. laevis*), were determined to have a high potential to occur based on presence of suitable habitat features as well as documented occurrences near the Project area. Three Narrow Endemic Plant species, San Diego ambrosia (*Ambrosia pumila*), spreading navarretia (*Navarretia fossalis*), and Wright's trichocoronis (*Trichocoronis wrightii var. wrightii*) were determined to have a low to moderate potential to occur within the Project area. No other Criteria Area Species or Narrow Endemic Plant species were determined to have the potential to occur within the Project area. Additionally, surveys determined that no burrowing owl habitat exists within the Project area; as such, burrowing owls are presumed to be absent from the Project area.

A total of eleven special status species were determined to have the potential to occur within the Project area (Table 1. Potential for Occurrence of Special Status Species). During protocol 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 (*Empidonax traillii extimus*; Appendix A – LBV and SWFL Survey Memorandums). Additionally, Coulter's goldfields, smooth tarplant, and tricolored blackbird (*Agelaius tricolor*) were considered to have a high potential to occur within the Project area due to the presence of suitable habitat features as well as local occurrences. Smooth tarplant was observed just outside of the Project impact area during biological

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surveys. The remaining five species – coast horned lizard (*Phrynosoma blainvillii*), western pond turtle (*Emys marmorata*), 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.

Table 1. Potential for Occurrence of Special Status Species

| Special Status Species | Potential for Occurrence | MSHCP Coverage |
|---|--------------------------|----------------|
| Coast horned lizard (<i>Phrynosoma blainvillii</i>) | Low to Moderate | No |
| Coulter's goldfields (<i>Lasthenia glabrata ssp. coulteri</i>) | High | Yes |
| Least Bell's vireo (<i>Vireo bellii pusillus</i>) | High | Yes |
| Smooth tarplant (<i>Centromadia pungens ssp. laevis</i>) | High | Yes |
| Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>) | High | Yes |
| Spreading navarettia (<i>Navarettia fossalis</i>) | Low to Moderate | Yes |
| Tricolored blackbird (<i>Agelaius tricolor</i>) | High | Yes |
| White rabbit-tobacco (<i>Pseudognaphalium leucocephalum</i>) | Low to Moderate | No |
| Western pond turtle (<i>Emys marmorata</i>) | Low | Yes |
| Woven-spored lichen (<i>Texosporium sancti-jacobi</i>) | Low to Moderate | No |
| Yellow Warbler (<i>Setophaga petechia</i>) | High | Yes |

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 Activity 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 this MSHCP Consistency Analysis. The Project is utilizing coverage from a 12,198-foot segment of proposed trail located approximately 1 mile northeast of the Project area. Consistent with Section 6.1.2 (Vol. I) of the MSHCP, the Project will provide biologically superior preservation of riparian/riverine resources at an off-site location.

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 habitat at a nearby off-site location (Table 2. Project Impacts and Mitigation). Mitigation efforts are designed with the objective of providing benefits that are equivalent or superior to that which will occur if effects to the riparian/riverine resource were avoided. The proposed off-site mitigation location is approximately 200 feet upstream of the proposed pedestrian bridge within French Valley Creek, on APN 480-160-022, which is a parcel of land within the channel that is currently identified as an RCA MSHCP Conservation Easement. A detailed mitigation proposal is outlined in the Project's Determination of Biologically Equivalent or Superior Preservation (DBESP) document and described in this document in Chapter 5.1.4. In order to

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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.

Table 2. Project Impacts and Mitigation

| Land Cover Type | Impact Type | Impact Area (acres) | Mitigation Ratio | Required Mitigation (acres) | Mitigation Location | Agency Jurisdiction |
|---|--|---------------------|------------------|-----------------------------|--|---------------------|
| Non-Sensitive Land Cover Types | | | | | | |
| Development | Permanent | 0.225 | - | - | - | - |
| | Temporary | 4.250 | - | - | - | - |
| <i>Total:</i> | | 4.475 | - | - | - | - |
| Riparian/Riverine Resources | | | | | | |
| 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 (Conservation Easement Land) | 0.050 | 2:1 | 0.100 | On-Site (0.050 acres) & Off-Site (0.050 acres) | RCA, CDFW |
| <i>Total:</i> | | 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 (Conservation Easement Land) | 0.094 | 2:1 | 0.188 | On-Site (0.094 acres) & Off-Site (0.094 acres) | RCA, CDFW |
| <i>Total:</i> | | 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 (Conservation Easement Land) | 0.035 | 2:1 | 0.070 | On-Site (0.035 acres) & Off-Site (0.035 acres) | RCA, CDFW |
| <i>Total:</i> | | 0.167 | - | 0.402 | - | - |
| <i>Riparian/Riverine Resources Total:</i> | | 0.895 | - | 1.804 | - | - |
| <i>Grand Total:</i> | | 5.370 | - | 1.804 | - | - |

The following permits will be obtained for the proposed Project prior to construction: Section 404 Nationwide Permit #14 from the United States (U.S.) Army Corps of Engineers (USACE), Section 401 Water Quality Certification from the Regional Water Quality Control Board (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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2 INTRODUCTION

The County proposes the development of a new pedestrian bridge crossing along Skyview Road to traverse the gap over French Valley Creek, providing a pedestrian linkage between the communities east and west of the channel. As a Permittee to the MSHCP, this Project must comply with the following MSHCP Sections:

1. Section 6.1.2: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools
2. Section 6.1.3: Protection of Narrow Endemic Plant Species;
3. Section 6.1.4: Guidelines Pertaining to the Urban/Wildlands Interface;
4. Section 6.3.2: Additional Survey Needs and Procedures;
5. Section 7.5.1: Guidelines for the Siting and Design of Planned Roads;
6. Section 7.5.2: Guidelines for Construction of Wildlife Crossings Within Criteria Area and Public/Quasi-Public Lands;
7. Section 7.5.3: Construction Guidelines; and
8. Standard Best Management Practices in Appendix C of the MSHCP

The purpose of this Consistency Analysis Report is to summarize the biological data for the Skyview Road Pedestrian Bridge Project and to document the Project's consistency with the MSHCP goals and objectives listed above.

2.1 Project Area

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 (Appendix B – Figure 1. Project Vicinity; Figure 2. Project Location). The entirety of the Project is located within the MSHCP Criteria Cell 5477 in Township 6 North, Range 2 West of the San Bernardino Base Meridian in the U.S. Geological Survey (USGS) 7.5-minute topographic maps.

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 (Appendix B – Figure 3. Project Features).

The Project is within the Southwest Area Region of the MSHCP. The Project exists primarily in the County's Right-of-Way (ROW), but includes the Assessor Parcel Numbers (APNs) listed in Table 3. Project Assessor Parcel Numbers.

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Table 3. Project Assessor Parcel Numbers

| Assessor Parcel Number | Owner | Conserved Land | Temporary Construction Easement |
|------------------------|----------------------------|----------------|---------------------------------|
| 480-160-021 | County of Riverside | No | Required |
| 480-160-024 | Flood Control District | Yes | Required |
| 480-160-025 | Bellacap | Yes | Required |
| 480-320-033 | Flood Control District | No | Required |
| 480-320-037 | Ryland Homes of California | No | Required |
| 480-320-038 | Flood Control District | No | Required |
| 480-620-007 | Bellacap | Yes | Required |

Land use within the Project area is a mix of development, emergent wetland, willow scrub riparian, and alkali marsh habitat. The Project would have impacts to emergent wetland totaling in approximately 0.177 acres of temporary impacts due to construction access, 0.007 acres of permanent impacts due to the installation of bridge piers, and 0.152 acres of shade impacts due to the new bridge spanning the channel. Additionally, the Project is 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 (Table 4. Impacts to Riparian/Riverine Resources). Approximately 0.179 acres of the temporary impacts described would occur on conservation easement lands owned by Bellacap and Ryland Homes of California.

Table 4. Impacts to Riparian/Riverine Resources

| Impact Type | Conservation Easement 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 |
| <i>Total Temporary Impacts:</i> | | <i>0.177</i> | <i>0.286</i> | <i>0.067</i> | <i>0.530</i> |
| Permanent | No | 0.007 | 0.029 | 0.009 | 0.045 |
| Shade | No | 0.152 | 0.077 | 0.091 | 0.320 |
| <i>Grand Total:</i> | | 0.336 | 0.392 | 0.167 | 0.895 |

¹Ryland Conservation Easement

²Bellacap Conservation Easement

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/create willow scrub riparian, emergent wetland, and alkali salt marsh habitat at a nearby off-site location. Mitigation efforts are designed with the objective of providing benefits that are biologically equivalent or superior to that which will occur if effects to the riparian/riverine resources

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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, totaling in 1.804 acres of mitigation, as indicated in Table 2. 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 will occur on APN 480-160-022, which is a parcel of land within the channel that is currently identified as a Western Riverside County RCA MSHCP Conservation Easement. 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.

2.2 Project Description

The 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 Skyview Road Pedestrian Bridge Project. Mitigation for temporary impacts associated

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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 to carry emergency vehicles while removable bollards will be placed at each end of the bridge to prevent regular vehicles from accidentally entering the bridge.

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.

2.3 Covered Roads

The proposed Project does not entail the construction of, or any improvements to, one or more Covered Roads. Additionally, the Project proposes to install a pedestrian bridge crossing as opposed to a vehicular bridge. The Project is in proximity to the junction of a covered Expressway (Highway 79) and Secondary Road (Jean Nichols Road); however, Skyview Road is not included as a Covered Road within the MSHCP. No net increase in road impact acreage will occur because of this Project.

2.4 Covered Public Access Activities

The pedestrian bridge crossing proposed by this Project is a Covered Public Access Activity. 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 proposed trail located approximately 1 mile northeast of the Project area (Appendix B – Figure 10. MSHCP Trail Coverage). The pedestrian bridge resulting from this Project will extend the regional trail network along Skyview Road to Highway 79, along Highway 79 north to Abelia Street, then extending east along the Flood Control levee to Washington Street and connecting with an existing trail. This proposed pedestrian bridge meets the criteria of Covered Public Access Activities for trails, facilities, and passive recreational activities.

The Project proposes a trail coverage swap with the existing MSHCP adopted proposed regional trail that was anticipated to span French Valley Creek slightly north of the Project area. The existing MSHCP adopted proposed regional trail has an approved length of 12,198 linear feet and 17 feet in width, with an area of 4.76 acres, and was anticipated to extend from Leon Road to just east of Washington Street, crossing both SR-79 and French Valley Creek, as shown on Figure 7-3 in the WRMSHCP. The County

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Transportation Department confirmed with the County Parks and Recreation Department that there is no plan to construct any portion of this identified trail, and that the Project could utilize this segment of trail through a trail coverage swap. The County of Riverside Transportation Department proposes to swap the 12,198 linear feet from the existing MSHCP adopted proposed regional trail from Leon Road to just east of Washington Street to cover a trail that begins at the intersection of Skyview Road and Pourroy Road, heads west along Skyview Road and crosses over the French Valley Creek at the Skyview Pedestrian Bridge Project location, along Skyview Road to SR-79, then heads north along SR-79, and then easterly at the intersection of SR-79 and Abelia Street and continues along the Riverside County Flood Control Facility until it connects with Washington Street, and then heads south along Washington Street to connect with an existing regional trail segment. The length of the new proposed trail would be 12,198 linear feet and approximately 12 feet in width along most of the 12,198-foot alignment, and 18 feet in width along the proposed bridge alignment (370 feet long) with an area approximately 3.43 acres. The new proposed trail would similarly cross over the French Valley Creek, resulting in equivalent trail coverage to be swapped for coverage of the Skyview Pedestrian Bridge Project. RCA confirmed that the Skyview Pedestrian Bridge Project would be considered a covered project with the trail coverage swap for the existing MSHCP adopted proposed regional trail on September 7, 2021.

Because the proposed Project involves the construction of a public access facility, the Project must adhere to Section 7.4.2 (Vol. I.) of the MSHCP, which outlines the provisions that are necessary for the Project to demonstrate MSHCP consistency. These provisions are evaluated below:

Guidelines for the Siting and Design of Trails and Facilities –

The construction of Skyview Pedestrian Bridge trail will impact biological resources within a MSHCP Conservation Area. Therefore, the following responses to the guidelines address ways to avoid and minimize impacts from the placement and design of the proposed trail facility on the MSHCP Conservation Area's natural resources.

1. **Trails and facilities will be sited and designed to be compatible with resource protection and in a manner that minimizes impacts to sensitive resources and Habitat types covered by the MSHCP. All decisions relating to public access will be made in a manner that is most protective of biological resources.**

An evaluation and comparison of impacts from a single span bridge and a multi-span bridge was performed to determine the least impactful bridge alternative considering both permanent and temporary impacts associated with construction and maintenance of the bridges. Based on this evaluation, a 4-span bridge was selected as the least environmentally damaging project alternative.

While a single span (free spanning the channel) bridge will not permanently impact the creek channel, it will increase the temporary impact acreages due to the temporary piers needed to be constructed within the channel, along with a larger crane needed to be placed within the channel in order to construct the single span bridge. A single span bridge will also have increased permanent shade impacts (approximately 0.37 acres), due to the higher necessary bridge height and structural depth which will shade a larger area throughout the day. At minimum, four temporary falsework/support beams will be constructed in the channel to allow for the bridge to be constructed/assembled on site as the span is too

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long to bring in a single piece of steel. In addition, the crane will need to be supported by temporary steel beams on multiple platforms, which will need to be constructed in the channel. The single span bridge will result in approximately 0.82 acres of temporary impacts (35,730 sq. feet). In order for a single span bridge to be feasible, the width will need to be increased to approximately 25 feet wide in order to sufficiently support the increased weight of the bridge and arch, which is wider than the allowable trail width under the MSHCP, and will be approximately 40 feet tall to be constructable due to the arch structure, resulting in a height of 50 feet from the top of the bridge to the bottom of the creek channel. The height of the single span bridge will potentially present a safety concern due to the likelihood of individuals climbing to the top of the span. The increased height will also reduce the neighborhood residents' privacy, potentially creating sightlines into the yards of the surrounding residences from the bridge. In addition, routine maintenance and inspection of the single span bridge will require equipment (such as a man lift) to access the bridge from the channel due to the arch structure preventing inspections from occurring from the bridge deck. Inspections of steel arch-type bridges must occur yearly and maintenance of the steel arch-type bridge is anticipated to occur more frequently than the multi-span bridge due to the increased weight of the bridge and length of the single span, causing additional stress to the structural components. In addition, metal structural components will be exposed to weather and corrosion. This will either require an access road be constructed within the creek, or partial use of the existing flood control ramp and regular temporary impacts to the channel throughout the lifespan of the bridge. Annual impacts associated with inspections and maintenance of a single span bridge will be approximately 0.41 acres.

A multi-span bridge, either with 3 or 4 spans, will require a smaller crane to construct the bridge, which will reduce the amount of temporary impacts to 0.53 acres for either bridge configuration; however, there will be 0.045 acres of permanent impacts within the creek corridor. The multi-span pedestrian bridge will be about 5 feet narrower than the single span bridge (approximately 20 feet in width) resulting in fewer shade impacts than the single span bridge, at approximately 0.32 acres, due to the lower height and narrower width of the multi-span bridge. The multi-span bridge will be concrete and have fewer maintenance concerns than the steel arch-type bridge required for the single-span design. Inspections of the multi-span bridge will be less frequent than for the single span, with the first inspection of the multi-span bridge not required until five years after construction. With the lower structure height, inspections could be completed from the bridge deck or from the channel without the use of a man lift or other vehicles, resulting in no temporary impacts to the creek throughout the bridge's lifespan. The placement of piers in the channel for the multi-span bridge is not anticipated to impact the hydrology of the channel, as the modeled change in water surface elevation with the multi-span bridge is approximately 0.03 to 0.06 inches, which is a negligible change that will not lead to scour impacts or velocity changes within the channel.

Total temporary and permanent impacts associated with the single span bridge are approximately 1.50 acres, compared to approximately 0.895 acres of total temporary and permanent impact associated with the multi-span bridge alternative. See Table 5. Bridge Alternative Impact Comparison and Appendix C – Impacts by Alternative Figures for anticipated impacts associated with each bridge configuration.

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Table 5. Bridge Alternative Impact Comparison

| Bridge Dimension (feet) | Bridge Alternative | |
|----------------------------------|--------------------|--------------|
| | Single Span | Multi-Span |
| Width | 25 | 20 |
| Height | 50 | 22 |
| Bridge Impacts (acres) | | |
| Permanent | 0 | 0.045 |
| Shade (permanent) | 0.37 | 0.32 |
| Temporary | 0.82 | 0.53 |
| Ongoing maintenance ¹ | 0.41 | 0 |
| Total Impacts | 1.60 | 0.895 |

¹Permanent access road or annual impacts during maintenance inspections

Further, the pedestrian bridge will be designed to accommodate wildlife crossing for wildlife species including avian, small, and large mammals, reptiles, amphibians, and insects. The bridge will provide eight (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 twelve (12) feet at its highest in the middle of the channel, providing clearance sufficient for large mammals such as mule deer per MSHCP guidelines. The bridge piers will be spaced approximately 90 feet apart, also allowing for sufficient space for large mammals to cross below the bridge. In this way, the Project will not impede wildlife usage of the channel as a migration corridor.

No overhead lighting is proposed along the trail within or adjacent to the creek corridor, and any lighting on the bridge will be recessed for pedestrian safety at night. Any proposed lights will be kept to a color temperature of 2200K or lower to ensure the lighting will not have the potential to pollute the creek corridor with a new light source.

Many alternatives for the proposed pedestrian bridge have been considered throughout Project design and the ultimate design will be compatible with resource protection, minimizing impacts to sensitive habitats and resources covered by the MSHCP.

2. **Trails and facilities will be located in the least sensitive areas of the MSHCP Conservation Area so that they avoid Habitat occupied by species covered by the MSHCP.**

The proposed Skyview Pedestrian Bridge is located across French Valley Creek which is bounded by levees operated and maintained by Riverside County flood control. A number of conservation easements exist within proximity to the Project area both upstream and downstream of the proposed pedestrian bridge location; however, the proposed Project is not within a MSHCP Conservation area, and the Project is not anticipated to permanently affect nearby conservation areas. The Project will require access to the site during construction through a conservation easement that exists within the Flood Control access ramp on the northwest side of the Project area; however, this will only require temporary disturbance in order to allow for construction equipment to access the site in order to construct the pedestrian bridge. The conservation easement allows for access through the conserved parcel for any County of Riverside Transportation Department improvements without restriction.

The proposed bridge crossing location will be located at the least sensitive location as the proposed pedestrian bridge will be constructed with a minimal width of 20 feet wide. Constructing the trail at either

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nearby roadway crossing upstream and downstream from Skyview Road will require substantial modifications to existing bridge structures over French Valley Creek, which will require larger temporary and permanent impact areas, further interfering with wildlife migration due to the widened structures. The southern crossing over French Valley Creek at Algarve Avenue is a large culvert crossing under the roadway of both Highway 79 and Blue Spruce Road and is currently 225 feet wide under Highway 79. If the proposed pedestrian trail was located at this crossing, the existing structure could potentially be utilized; however, this alternative crossing location will require additional right-of-way, including potential impacts to the backyards of nearby residents, and will require approximately 5,280 more linear feet of trail coverage than what is currently allowed within the MSHCP in order to provide similar connectivity to nearby trails. Finally, constructing the trail at either nearby roadway crossing upstream and downstream from Skyview Road would not be consistent with the overall purpose of the Project, which is to efficiently connect the residential areas with the nearby library and school with a nearby trail crossing.

The northern crossing of French Valley Creek located at Pourroy Street is currently 90 feet, and if widened to accommodate the proposed pedestrian trail, would potentially be widened up to 110 feet to accommodate the proposed trail. This alternative would result in potentially significant wildlife crossing impacts as widening this structure would require a substantially greater footprint within the French Creek Corridor and further degrade wildlife crossing due to the width of the structure without any natural light.

The proposed Project area along Skyview Road will require a smaller construction footprint than alternative locations that have been proposed, which will result in minimal temporary and permanent impacts to the channel. The pedestrian bridge will discourage foot traffic through the sensitive creek corridor by providing easy pedestrian access over the creek and implementing fencing, signs, and other means of deterring pedestrians from entering the channel. The proposed Project location also will provide for better connectivity between important community resources, mainly the nearby French Valley Library and Susan LaVorgna Elementary School.

3. **Prior to design and construction of public access facilities, biological surveys will be conducted within the study area for the facility including vegetation mapping and species surveys and/or wetland delineations based on field conditions as recommended by the project biologists. The results of the biological resources investigation will be mapped and documented. The documentation will include preliminary conclusions and recommendations regarding potential effects of facility construction on MSHCP Conservation Area resources and methods to avoid and minimize impacts to MSHCP Conservation Area resources in conjunction with project siting, design, construction, and operation. The project biologist will work with facility designers during the design and construction phase to ensure implementation of Feasible recommendations.**

Biological surveys have been conducted including vegetation mapping, species surveys, and wetland delineations. The results have been documented in a Biological Resources Report. The results of the biological surveys indicate that the Project site consists of emergent wetland, willow scrub riparian, and alkali salt marsh.

In addition to biological surveys, database research and aerial analyses have been conducted to gather an understanding of resources within the proposed Project area. Results of a historical aerial analysis, as found in the attached Historic Aerials documentation, show that the channel drainage was restricted by

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agricultural activity prior to 2006, and by 2007, it had been formalized downstream of the proposed pedestrian bridge, and formalized upstream of the bridge by 2013. Review of the historic aerials also shows that the width of the channel and amount of riparian vegetation within the channel both upstream and downstream of the proposed pedestrian bridge location has remained fairly constant since prior to formalization of the flood control channel through present date. An exception to this is clearing of some of the vegetation within the channel apparent in aerial images from 2014, which was done as a part of a restoration effort by a developer, Barratt American Incorporated; however, since the area's restoration, the riparian vegetation in the area has remained.

With thorough biological surveys and background research, Riverside County has gained an understanding of the biological resources within the proposed Project area and has evaluated the potential effects of facility construction at this location. Weekly meetings are held between the design team and environmental team to ensure that the Project considers and implements methods to avoid and minimize impacts to MSHCP Conservation Area resources as well as following guidelines to ensure the Project is consistent with trail siting guidelines, design, construction, and operation goals of the MSHCP. Project design features to limit foot traffic through the sensitive creek corridor include implementing fencing, signs, and other means of deterring pedestrians from entering the channel and instead utilizing the new pedestrian bridge to avoid continual impacts to the creek corridor.

4. Recreational activities and the construction of trails and facilities on highly erosive soils will be avoided.

No highly erosive soils exist within the Project area; therefore, the Project is avoiding construction of facilities on highly erosive soils.

5. Trails and facilities will be designed to discourage and prevent intrusion into adjacent environmentally sensitive areas.

The proposed pedestrian bridge will link Skyview Road over French Valley Creek and will not provide or permit access into the channel where an environmentally sensitive area exists. Access to the channel is currently restricted due to the restoration efforts and will continue to be restricted after the proposed pedestrian bridge is constructed to prevent intrusion into the channel.

The direct connection via a pedestrian bridge over French Valley Creek between the elementary school and new public library will also serve as a deterrent for intrusion and cut throughs within the riparian vegetation and conservation easements within the channel. As a component of the Project, fencing or other deterrents will be provided to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted. Riverside County will be responsible for maintaining the fencing to ensure no vandalism has occurred and ensure access to the creek channel is limited.

6. New trails and facilities will avoid using wildlife crossing points.

Proposed Constrained Linkage 18 has been identified within the Project area which provides Live-In and Movement Habitat for common mammal species, such as bobcat. The pedestrian bridge will be narrow (approximately 20 feet in width) and will be designed to accommodate wildlife crossing for wildlife species including birds, small and large mammals, 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

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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 per MSHCP guidelines. The bridge piers will be spaced approximately 90 feet apart, also allowing for sufficient space for large mammals to cross below the bridge between the piers.

7. New trails and facilities will be accessible from existing and planned public roads.

The proposed pedestrian bridge will connect the existing Skyview Road cul-de-sacs located on the east and west banks of the French Valley Creek flood control facility. The path will provide access to the nearby Susan LaVorgna Elementary school and new French Valley Library, as well as provide connectivity to the planned regional trail network along Highway 79, which currently is anticipated to terminate at the intersection of Skyview Road/Jean Nicholas Road and Highway 79.

The termination of this planned regional trail along Highway 79 at Skyview Road anticipated that Skyview Road will provide a through roadway connection over French Valley Creek; however, as a vehicular bridge is no longer proposed over the channel, a pedestrian bridge will provide connectivity between the planned regional trail, public library, and elementary school.

8. New facilities will minimize impacts from lighting.

The pedestrian bridge does not anticipate introducing new overhead lighting and any lighting impacts will be minimized through the use of low-profile LED lights with a color temperature of 2200K or lower within the bridge railings to help illuminate the path for pedestrians, while avoiding creating a new source of light within French Valley Creek. The placement of the LED lights within the bridge railings will enhance pedestrian safety without light intrusion onto the biologically sensitive channel.

9. Environmentally sensitive grading techniques, drainage management and vegetation buffers will be used for trail and facility runoff absorption and filtration.

The Project will be constructed utilizing the Construction Guidelines outlined in Section 7.5.3 (Vol. 1.) of the MSHCP, including sensitive grading techniques and providing for proper drainage and allowances for vegetation buffers. The Project is anticipated to minimally impact French Valley Creek, largely for temporary access in order to construct the proposed pedestrian bridge.

Stormwater runoff collected on the bridge will be collected via inlets on the bridge which will drain to a pipe inside the bridge cell and direct all stormwater from the bridge deck to drain the water to the storm drain at both ends of the approaches. This will ensure no water from the bridge deck flows directly into the creek channel and instead is directed to adjacent stormwater collection facilities. This will reduce the potential for erosion, as all water will be collected and directed into the existing stormwater facilities.

10. When landscaping is required, only native species will be used. The use of nonnative invasive plant species will be prohibited.

The temporary impact area associated with construction of the bridge will be rehabilitated with native plant species, weed controlled, and monitored for vegetative success. The planting pallet will not include any species listed in the MSHCP's Table 6.2 Plants that Should be Avoided Adjacent to the MSHCP Conservation Area.

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11. **Whenever possible, trail alignments in the MSHCP Conservation Area will use existing dirt roads.**

The Project will not construct a trail in an otherwise undeveloped area nor is it located within a MSHCP Conservation Area. Furthermore, there are no existing dirt roads at or near the proposed trail alignment. The proposed trail alignment spans the existing paved Skyview Road, which terminates in cul-de-sacs at both ends of French Valley Creek. The pedestrian bridge will span French Valley Creek and connect the two cul-de-sacs via a facility constructed for only pedestrian use. The proposed Project will provide a controlled access point to cross the creek. Currently, existing sidewalks along Skyview lead the public to the creek, where the sidewalks terminate without connection to the cul-de-sac across the creek at this location. Due to the lack of connection to the adjacent cul-de-sac, pedestrians, including elementary school-aged kids, have the potential to enter the channel and disturb the habitat and wildlife. The trail is proposed at this location in order to connect this gap in the existing sidewalks and to provide controlled access in an area that is regularly disturbed by pedestrians travelling across the creek as a much shorter alternative to taking existing paved routes along Flood Control maintenance roads, Pourroy Road, and Algarve Road.

12. **Trails will be kept along the edges of large sensitive areas of habitat such as meadows and riparian areas.**

The proposed trail alignment is proposed to cross French Valley Creek with a 18-foot-wide pedestrian bridge which will connect two existing paved roads, both of which terminate in cul-de-sacs at both ends of French Valley Creek. As the objective of the Project is to cross the creek, the proposed bridge cannot feasibly be kept along the edges of riparian habitat. However, the pedestrian bridge will require minimal permanent impacts to the riparian area within the creek pending design advancement. The proposed bridge design has been selected to minimize these impacts while still meeting Project objectives.

13. **The type, width, and intensity of trail uses will be consistent with protection of the resources being traversed.**

The proposed pedestrian bridge will be 18 feet wide and have no operational impact on sensitive resources, as pedestrian access to the channel will not be possible once the bridge is constructed.

14. **When determined to be appropriate, trails will be constructed to any prominent features or viewpoints that are likely to attract hikers in order to prevent off-trail access and extensive trampling of adjacent Habitat by hikers.**

The proposed pedestrian bridge will span French Valley Creek between the flood control levees and will not provide or permit access into the channel. The direct connection via a pedestrian bridge over French Valley Creek between the elementary school and new public library will also serve as a deterrent for intrusion and cut throughs within the riparian vegetation and conservation easements within the channel.

Interpretive signage will be included as a Project feature to inform the public of the biological sensitivity of the creek corridor, the protected species that utilize the channel, and to inform the public that access to the creek channel is restricted due to the sensitivity. Interpretive signs will be placed at both ends of the bridge and/or in the center of the bridge to ensure all pedestrians are informed that creek access is restricted and to prevent encroachment into the sensitive corridor.

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As a component of the Project, fencing or other deterrents will be provided to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted.

15. Water breaks will be installed on steep trails to prevent accelerated runoff and erosion.

The proposed trail is flat in elevation and will not include the construction of steep trails; therefore, no water breaks will be necessary.

16. Dog-friendly trails will be located in areas of relatively low habitat value or edges.

As a component of the Project, fencing will be installed to discourage entry by dogs and humans into the creek corridor. Signage will be placed at both ends of the bridge informing the public that access to the channel is restricted. Dog use of the bridge will have no effect on the creek.

Guidelines for Operations and Maintenance-

Passive uses can generate noise and litter, trails are vulnerable to erosion and gulying, and vegetation off trail may be trampled by hikers, mountain bikers, and equestrian users. Many of these guidelines for operation and maintenance specifically apply to dirt trails located in undeveloped natural areas and do not apply to the Project, which will construct a paved pedestrian bridge connecting existing roads over a stream channel located in a largely developed area. However, to protect the MSHCP Conservation Area's resources during operations and maintenance activities, the following guidelines have been developed under the MSHCP and will be implemented as part of the proposed Project as applicable:

1. Passive recreation uses may include:

- bird watching
- hiking, equestrian, and mountain bike uses on designated trails
- photography
- scientific research
- sunbathing
- picnicking in designated areas

The proposed Project will be compliant with the applicable permitted passive recreation activities. A bench is proposed to be constructed on the north side of the bridge approximately 100 feet north of the channel to minimize passive recreation disturbance. There are no designated picnicking areas within the Project area, and as a pedestrian bridge, the Project will not encourage picnicking activities; therefore, this recreation usage is not applicable to the Project.

2. The following recreational uses and activities will be prohibited within the MSHCP Conservation Area:

- o Camping
- o off-road vehicle use
- o recreational activities that require construction of new facilities and roads other than those described above

The proposed Project will be compliant with the prohibited recreation activities.

3. Effects of passive recreational uses shall be addressed in Reserve Management Plans described in Section 5.2.2.

The Project will have no effects of passive recreational uses; therefore, no management plan is required.

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4. **Motorized vehicular access by the public to the MSHCP Conservation Area will be prohibited except as necessary by emergency personnel or for operations and maintenance activities.**

The Project is a pedestrian bridge crossing that restricts vehicular crossing. The proposed bridge will be designed to allow emergency vehicle access with removable bollards placed at each end of the bridge to prevent regular vehicles from accidentally entering the bridge. Additionally, maintenance activities will be completed from the bridge deck.

5. **Appropriate daily and seasonal limits on trail use will be established. When necessary, trails will be closed on a temporary basis to minimize disruption of nesting and other wildlife functions for species covered by the MSHCP, or if public access has resulted in, or is expected to result in, significant negative impacts to sensitive species. Passive recreational uses will be limited or restricted in critical wildlife areas during breeding season, as determined appropriate.**

Pedestrian use of the bridge will not disrupt wildlife functions and seasonal limits will not be required. No limitations on trail use are anticipated.

6. **Public access may be restricted within and adjacent to wetlands, vernal pools, restoration areas, and sensitive wildlife Habitat (e.g., during the breeding season) at the discretion of the Reserve Manager.**

Public access to adjacent sensitive habitat communities is restricted.

7. **In the event that public access policies and other policies conflict, the conflict will be resolved in a manner that's most protective of the biological resources within the MSHCP Conservation Area.**

Public access policy conflicts are not anticipated as a result of the Project. Any conflicts will be resolved in a manner that conforms to the guideline above.

8. **Access to the MSHCP Conservation Area will be controlled through properly maintained fencing and signs.**

Fencing installed to limit entry to the creek corridor will be maintained as needed to ensure it continues to function as intended. Signage will be placed at both ends of the bridge informing the public that access to the channel is restricted.

9. **Fencing or other barriers will be used to restrict access to basically sensitive areas when protection of biologically sensitive resources is required.**

As a component of the Project, the fencing, deterrents, and signage that will be provided to ensure no potential encroachment into the creek occurs will be maintained as needed.

10. **Public access information packets and guides will be developed for users of the MSHCP Conservation Area.**

The Project proposes the installation of a pedestrian bridge crossing over French Valley Creek. Public access to conservation areas is not proposed as a facet of this Project. As such, no information packets or guides will be developed.

11. **Education and outreach will be used to increase public awareness and appreciation for Habitat and wildlife values.**

Interpretive signage will be included as a Project feature to inform the public of the biological sensitivity of the creek corridor, the protected species that utilize the channel, and to inform the public that access to the creek channel is restricted due to the sensitivity. Interpretive signs will be placed at both ends of

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the bridge and/or in the center of the bridge to ensure all pedestrians are informed that creek access is restricted and to prevent encroachment into the sensitive corridor.

12. **The MSHCP Conservation Area will be patrolled on a regular basis in order to ensure that visitors to the MSHCP Conservation Area stay on trails and observe all other rules and guidelines established to protect the natural resources on site.**

The Project proposes the installation of a pedestrian bridge crossing over French Valley Creek. Public access to conservation areas is not proposed as a facet of this Project. As such, no regular patrols of the MSHCP Conservation Area are proposed.

13. **Feeding of all wildlife will be prohibited.**

The public will not be in contact with wildlife as the proposed bridge will carry users over the creek, keeping them out of the riparian corridor. The proposed Project will be compliant with the above guideline.

14. **Firearms will be prohibited from patrol and maintenance sites, except for those used by authorized law enforcement and security personnel.**

The proposed Project will be compliant with the above guideline.

Maintenance

15. **The trails and other facilities within the MSHCP Conservation Area require proper maintenance to ensure the protection of biological resources. Trails, facilities, signs and barriers will be maintained to appropriate conditions to discourage and prevent intrusion into adjacent environmentally sensitive areas.**

As a component of the Project, fencing or other deterrents will be built and maintained to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted. The fencing will be maintained by the County to appropriate conditions to discourage and prevent intrusion into adjacent environmentally sensitive areas.

Hiking

16. **Hikers must always stay on designated trails and must not stray into adjacent areas to prevent trampling of vegetation and erosion.**

While the pedestrian bridge will not provide access to the vegetated channel, as a component of the Project, fencing or other deterrents will be provided to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted.

Equestrian Use

17. **Equestrian use will be limited to designated trails.**

While the pedestrian bridge will not provide access to the vegetated channel, as a component of the Project, fencing or other deterrents will be provided to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted. Therefore, equestrian use will be restricted from the channel.

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18. Following heavy rains, the use of equestrian trails will be prohibited for appropriate periods to avoid trail damage and impacts to adjacent Habitat.

The proposed trail will be paved and not subject to trail damage following heavy rains.

Mountain Biking

19. Mountain bike trails will be limited to areas with low susceptibility to erosion and out of wetlands and other sensitive areas.

The proposed trail will be paved and access will be restricted to areas not susceptible to erosion and with no potential to encroach within wetlands.

20. If use becomes heavy and problematic, an access control system will be developed and permits may be required.

Not applicable.

21. Mountain bike trails will be constructed wider than foot trails to prevent trail edge disturbance and on grades no greater than 25 percent.

Not applicable.

Litter and Trash Control Measures

22. Litter control measures will be implemented within the MSHCP Conservation Area.

The proposed Project will be compliant with the above guideline.

23. Closed garbage cans and recycling bins will be provided at trailheads and access points.

The Project does not propose a trailhead or access point. As such, no closed garbage cans or recycling bins are proposed by this Project.

24. Litter and trash will be collected and removed on a regular basis. Garbage cans and recycling bins will be maintained appropriately.

No garbage cans or recycling bins are proposed by this Project. As such, no regular removal of litter and trash is necessary.

25. Penalties will be imposed for littering and dumping within the MSHCP Conservation Area.

The proposed Project will be compliant with the above guideline.

26. Permanent storage of materials (e.g., hazardous and toxic materials) outside of maintenance facilities within the MSHCP Conservation Area will be prohibited.

No permanent storage of materials outside of maintenance facilities is proposed by this Project.

27. Wildlife Corridor undercrossings will be kept free of all debris, trash, and other obstructions.

The proposed pedestrian bridge crossing will result in a wildlife undercrossing at the Project site. Debris, trash, and other obstructions resulting from the proposed Project will be removed from the site.

28. Signs will be posted to prevent and report littering.

The proposed Project will be compliant with the above guideline. Interpretive signage will be included as a Project feature to inform the public of the biological sensitivity of the creek corridor, the protected

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species that utilize the channel, and to inform the public that access to the creek channel is restricted due to the sensitivity. Interpretive signs will be placed at both ends of the bridge and/or in the center of the bridge to ensure all pedestrians are informed that littering is prohibited and to report any littering in the sensitive corridor.

Pets

29. Pets will be restrained by leashes at all times.

The pedestrian bridge and associated trail will span French Valley Creek; however, access to the creek will be restricted and it is not anticipated dogs will have the likelihood of disturbing wildlife or sensitive habitats. As a component of the Project, fencing or other deterrents will be provided to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted.

Signage

Signs can educate, provide direction, explain rules, and promote the sensitive use and enjoyment of natural areas.

30. An adequate number of signs will be provided at appropriate locations to clearly identify public access to and within the MSHCP Conservation Area.

As a component of the Project, fencing or other deterrents will be provided to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted.

31. Interpretive signs will be provided to explain the value of the MSHCP Conservation Area's natural resources.

An interpretive sign will be included as a Project feature to inform the public of the biological sensitivity of the creek corridor, the protected species that utilize the channel, and to inform the public that access to the creek channel is restricted due to the sensitivity. Interpretive signs will be placed at both ends of the bridge and/or in the center of the bridge to ensure all pedestrians are informed that creek access is restricted and to prevent encroachment into the sensitive corridor.

2.5 General Setting

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 within Criteria Cell 5477 (Appendix B – Figure 2).

2.6 Avoidance and Minimization Measures

Avoidance and minimization measures BIO-1 through BIO-27 will 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.

Avoidance/Minimization Measures:

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- 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).

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- 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 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.

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- 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.

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- 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 Californian Department of Fish and Wildlife prior to construction), and pond turtle trapping if needed.

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3 RESERVE ASSEMBLY ANALYSIS

The proposed Project is located within Criteria Cell 5477 in Subunit 5 of the Southwest Area of the MSHCP. This Criteria Cell, which totals approximately 161 acres, consists of two residential communities bisected by French Valley Creek. The pedestrian bridge crossing proposed by the Project will span the creek channel near the southwest corner of the Criteria Cell, providing a pedestrian linkage that connects Skyview Road. The Project area required for this Project is approximately 5.298 acres (Appendix B – Figure 3).

Three types of conserved lands exist within the Criteria Cell, all of which can be found in French Valley:

- MSHCP Conserved Lands (11.6 acres)
- Quasi-public Conserved Lands (2.7 acres)
- Non-MSHCP Conservation Easements (6.8 acres)

Criteria Cell 5477 falls within Subunit 5 - French Valley/Lower Sedco Hills. The target acreage range for Additional Reserve Lands within this subunit is approximately 4,360 – 7,395 acres. There are 13 Planning Species identified for the French Valley/Lower Sedco Hills Subunit and Criteria Cell 5477 (discussed below; Table 6. Potential for Planning Species) and the following Biological Issues and Considerations:

- Conserve a large block of Habitat generally east of I-215 and south of Scott Road for narrow endemic species.

The Project area is located east of I-215 and south of Scott Road and may contain suitable habitat for some Narrow Endemic Species (see Chapter 6); however, focused botanical surveys produced negative results for these species within the Project area. Regardless, the Project will include a comprehensive mitigation effort that will compensate for all impacts to potentially suitable Narrow Endemic Species habitat within the Project area. See Chapter 5.1.4 of this document for a summary of planned mitigation activities.

- Provide connection to the Southwestern Riverside County Multi Species Reserve.

The Project area is located over 10 miles away from the Southwestern Riverside County Multi Species Reserve and the proposed Project will not affect local connections to the Reserve.

- Conserve clay soils supporting long-spined spine flower, Munz's onion and Palmer's grapplinghook.

No clay soil types were identified within the proposed Project area and long-spined spine flower, Munz's onion and Palmer's grapplinghook are presumed absent from the Project area. The proposed Project area does not intersect a Proposed or Existing Core Area for these species and will not impede the overall function of a Reserve feature used by these species.

- Maintain Core and Linkage Habitat for bobcat.

The Project area intersects Proposed Constrained Linkage 18, which provides Live-In and Movement Habitat for common mammal species such as bobcat; however, the proposed Project design allows approximately 8 to 12 feet of vertical clearance beneath the bridge and 90 feet of horizontal width

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between bridge piers, maintaining the wildlife corridor for bobcats and other larger mammals. In this way, function and connectivity of the Reserve Linkage is maintained.

- Determine presence of potential Core Area for Los Angeles pocket mouse along Warm Springs Creek.

Warm Springs Creek is not located within the proposed Project area and it was determined that the Project area lacks suitable habitat for the Los Angeles pocket mouse. The proposed Project area does not intersect a Proposed or Existing Core Area for this species and will not impede the overall function of a Reserve feature used by this species.

- Maintain Core and Linkage Habitat for Quino checkerspot butterfly.

The proposed Project area lacks suitable habitat for Quino checkerspot butterfly and the species is presumed absent. Furthermore, the proposed Project area does not intersect a Proposed or Existing Core Area for this species and will not impede the overall function of a Reserve feature used by this species.

- Maintain Core Area for western pond turtle.

The proposed Project area does not intersect a Proposed or Existing Core Area for this species and will not impede the overall function of a Reserve feature used by this species. 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.

- Maintain Core Area for Riverside fairy shrimp.

The proposed Project area lacks suitable habitat for Riverside fairy shrimp and the species is presumed absent. Furthermore, the proposed Project area does not intersect a Proposed or Existing Core Area for this species and will not impede the overall function of a Reserve feature used by this species.

In general, the area within Criteria Cell 5477 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. Additionally, the installation of the French Valley Library was recently completed at the western bank of French Valley Creek, north of Skyview Road. There is a plot of undeveloped land located in the northwest corner of the Criteria Cell west of Highway 79; however, this area is frequently disturbed, surrounded by residential properties, and does not provide suitable habitat that will support Planning Species or the local Proposed Constrained Linkage 18. The proposed Project is not anticipated to have any potential impacts to the Planning Species outlined for Subunit 5 of the MSHCP. Table 6 describes rationale for each species being presumed absent from the Project area:

Table 6. Potential for Planning Species

| Common Name/Scientific Name | Potential for Species Presence |
|--|--|
| Reptiles | |
| Western pond turtle <i>Emys marmorata</i> | Low Potential: This Project area does not include a permanent surface water source (French Valley Creek is intermittently wetted), but sometimes contains open ponded water, which is potentially suitable habitat for the species. Furthermore, Riverside County Parks trapping and radiotelemetry studies |

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| Common Name/Scientific Name | Potential for Species Presence |
|---|---|
| | have documented the species approximately 0.5 miles west of the Project area. |
| Birds | |
| Bell's sage sparrow <i>Artemisospiza belli</i> | Absent: The Project area lacks coastal sage scrub and chaparral habitat and is in a developed area (Audubon 2021). |
| California horned lark <i>Eremophila alpestris</i> | Absent: The Project area lacks suitable grassland habitat utilized by this species (CDFW 1990a). |
| Coastal California gnatcatcher <i>Polioptila californica californica</i> | Absent: The Project area lacks coastal sage scrub vegetation communities strongly associated with this species (USFWS 2010). |
| Swainson's hawk <i>Buteo swainsoni</i> | Absent: The Project area lacks tall nesting trees and recent urbanization limits potential foraging habitat (CDFW 2006). |
| Grasshopper sparrow <i>Ammodramus savannarum</i> | Absent: The Project area is not situated in the foothills and lacks dense grassland habitat (CDFW 2008a). |
| Southern CA rufous-crowned sparrow <i>Aimophila ruficeps</i> | Absent: The Project area lacks sage scrub, chaparral, or grassland vegetation communities (SDMMP 2010). |
| Mammals | |
| Bobcat <i>Lynx rufus</i> | Low Potential: The Project area does not include rough, rocky terrain, deciduous/coniferous forests, or chaparral habitat. However, French Valley Creek is a functional wildlife corridor, and the species may be transient through the French Valley Creek corridor (CDFW 1990b). |
| Los Angeles pocket mouse <i>Perognathus longimembris</i> | Absent: The Project area lacks suitable grassland, sage scrub habitat and/or intermittent sandy washes |
| Insects | |
| Quino checkerspot butterfly <i>Euphydryas editha quino</i> | Absent: The Project area lacks coastal sage scrub habitat and does not contain host species used by larvae (FWS 2021). |
| Plants | |
| Long-spined spineflower <i>Chorizanthe polygonoides var. longispina</i> | Absent: The Project area lacks suitable coastal sage scrub, chaparral, or valley grassland habitat (CNPS 2021). |
| Munz's onion <i>Allium munzii</i> | Absent: The Project area lacks suitable woodland, chaparral, or valley grassland habitat (CNPS 2021). |
| Palmer's grapplinghook <i>Harpagonella palmeri</i> | Absent: The Project area lacks suitable coastal sage scrub, chaparral, and valley grassland habitat (CNPS 2021). |

While the Project is not anticipated to conflict with the conservation goals of its applicable Criteria Cell, mitigation for the Project will provide a net increase in functions and values of the existing habitat within the Project area via on-site re-establishment and a nearby off-site mitigation project. See Chapter 5.1.4 of this document for a summary of planned mitigation activities.

In addition to discussing the goal requirements of the applicable Criteria Cell that the proposed Project area is located within, the Reserve Assembly Analysis includes review of Covered Roads, and Existing and Pending Conservation.

Covered Roads within the Criteria Cell 5477 include Highway 79, a Covered Expressway, and Jean Nichols Road, a Secondary Road. These Covered Roads are located outside of the proposed Project

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area; the only road within the Project area is Skyview Road. Maintenance and other related activities on Skyview Road within the Project area are Covered, as Skyview Road is a County-maintained paved road (MSHCP Table 7-3). However, as the Project proposes to install a pedestrian bridge crossing as opposed to a vehicular bridge, the Project is not proposing any improvements to Covered Roads and will not result in an increase in road impact acreage (see Chapter 2.3).

The Project area intersects a small portion of a Conservation Easement held by Bellacap that is located north of Skyview Road (Table 3; Appendix B – Figure 3 and Figure 8. MSHCP Criteria Cell Features). The Project could potentially require access to the site during construction through this conservation easement that exists within the Flood Control access ramp on the northwest side of the Project area; however, this will only require temporary disturbance to allow for construction equipment to access the site for the construction of the pedestrian bridge. No other Conserved Lands are located within the Project area.

3.1 Public Quasi-Public Lands

3.1.1 Public Quasi-Public Lands in Reserve Assembly Analysis

The proposed Project is not located in Public or Quasi-Public (PQP) Lands. The nearest PQP lands within the watershed are located approximately 3.7 miles downstream. Construction of the proposed pedestrian bridge will not impact PQP lands.

3.1.2 Project Impacts to Public Quasi-Public Lands

Not applicable.

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4 VEGETATION MAPPING

A majority of the 5.298-acre Project area has been mapped as “development” which includes existing pavement and urban landscaping that provide limited habitat value. Natural plant communities are limited to the French Valley Creek corridor which is approximately 370 feet wide and constrained by man-made levees on both banks. The levees are protected from scour by large rip rap and sections of revetment.

Due to the presence of riparian habitat features as well as the various Additional Survey Needs and Procedures required for this Project, a Project-level vegetation map is required. Natural vegetation communities found within the Project area are limited to the French Valley Creek corridor, which includes emergent wetland (0.336 acres), willow riparian scrub (0.328 acres), and alkali salt marsh (0.167 acres). These natural plant communities were identified during biological surveys, mapped aerially, and are depicted in Appendix B – Figure 4. Vegetation Communities. Potential impacts to these sensitive communities can be viewed on Appendix B – Figure 5. Project Impacts. Sensitive habitat communities are discussed in more detail below.

4.2 Emergent Wetland

Emergent wetland habitat within the French Valley Creek corridor consists of dense cattail (*Typha* sp.) dominated emergent vegetation within the thalweg of the stream channel. Approximately 0.336 acres of emergent wetland were delineated within the Project area by Power Engineers in 2020.

4.1 Willow Riparian Scrub

Willow riparian scrub habitat within the French Valley Creek corridor consists of thickets of arroyo willow (*Salix lasiolepis*) and tamarisk (*Tamarix ramosissima*) with mule fat (*Baccharis salicifolia*) and various forb species found in more open areas of this habitat type. Approximately 0.328 acres of this habitat type are found along both levees and immediately upslope of emergent vegetation.

4.3 Alkali Salt Marsh

Alkali salt marsh habitat is found in portions of the French Valley Creek corridor that were re-graded in 2014 as part of a separate creek realignment project. This habitat type is thinly vegetated with mulefat, big saltbush (*Atriplex lentiformis*), and several species of annual halophytes. Approximately 0.167 acres of this habitat type are present within the Project area.

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5 PROTECTION OF SPECIES ASSOCIATED WITH RIPARIAN/RIVERINE AREAS AND VERNAL POOLS (SECTION 6.1.2)

All projects should assess their sites for Section 6.1.2 resources, including riparian/riverine resources, vernal pools, fairy shrimp, and riparian birds. The proposed Project was evaluated for these habitat provisions to assess and protect resources used by MSHCP-covered species, as well as existing and future downstream conservation areas.

5.1 Riparian/Riverine

The Project area intersects French Valley Creek, a seasonal stream channel originating in the hills north of Bachelor Mountain, about 4 miles east of the Project area, and terminating as a tributary to Warm Springs Creek, about 2.5 miles southwest of the Project area. French Valley Creek's associated alkali salt marsh, emergent wetlands, and willow scrub riparian habitats are the riparian/riverine resources within the Project area.

5.1.1 Methods

A general biological survey was completed by Dokken Engineering (Dokken) biologist Scott Salembier on July 24, 2019. During this survey, general habitat types and dominant species within the creek corridor were observed, recorded, and photographed.

Additionally, field investigations conducted on April 22 and June 9, 2020 by POWER Engineers' biologists identified the presence of potential jurisdictional wetlands and waterways within and in the vicinity of the Project area. USACE and CDFW guidance were used to determine the jurisdictional boundaries of waters of the U.S. (WOUS) and State (WOS) within the Project area. Guidance documents are outlined below:

- "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)

Wetland boundaries were identified via a three-parameter approach that evaluates hydrophytic vegetation, hydric soils, and hydrology as wetland indicators. Wetland boundaries were defined during field investigations and mapped using aerial photography. Similarly, waterways observed within the Project area were classified based on their observed flow and channel characteristics. These features,

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along with the Ordinary High Water Mark (OHWM), were used to characterize the existence of WOUS and WOS within the Project area.

The field investigation identified an intermittent stream with an adjacent wetland complex within French Valley Creek. The wetland boundaries and the stream's OHWM were mapped aerially and are depicted in the *Wetland and Waterway Delineation Report* produced by Power Engineers, Inc. (Appendix D. Wetland and Waterway Delineation Report). CDFW jurisdictional habitats were delineated as the riparian/riverine resources found within the entire width of the channel.

5.1.2 Existing Conditions and Results

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. These habitats provide potentially suitable conditions for a variety of rare plant species including smooth tarplant, Coulter's goldfields, and spreading navarretia (*Navarretia fossalis*). See Chapter 4 for a more detailed discussion of the vegetation communities present on-site.

The riparian/riverine habitat within French Valley Creek similarly functions to provide sensitive habitat for several riparian bird species (see Chapter 5.4). The thickets of arroyo willow and cattail provide sufficient nesting habitat for migratory nesting birds. Additionally, the entirety of French Valley Creek functions as a riparian wildlife corridor which passes through the residential housing communities of French Valley and to the eastern face of the Murrieta Hogback Mountains. For example, this corridor is identified as Proposed Constrained Linkage 18 for bobcat. In this way, French Valley Creek provides diverse riparian habitat conditions within a quickly developing residential community in French Valley.

5.1.3 Impacts

Preliminary geotechnical investigations for the Project are anticipated to have temporary impacts to 0.076 acres of alkali salt marsh habitat, 0.063 acres of emergent wetland, and 0.055 acres of willow scrub riparian habitat (Appendix B – Figure 6. Geotechnical Survey Impacts). However, these impacts are located entirely within the temporary impact and shade impact areas for the construction of the Project, and geotechnical borings will be backfilled according to industry standard practice to protect

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groundwater resources. 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.

Project impacts will include 0.045 acres of total permanent impacts to riparian/riverine nesting habitat due to the installation of the pedestrian bridge piers and improvements to existing stormwater drainage facilities at the edges of the channel. The Project will also have a total of 0.320 acres of permanent shade impacts to riparian/riverine resources associated with the resulting bridge. Shade impacts were calculated using sun path and shadow data (available on sunearthtools.com). This methodology accounts for the angle of the sun in the summer peak of the growing season as well as the bridge height to determine areas that will receive less than 6 hours of direct sunlight throughout the day. Additionally, there will be 0.530 acres of total temporary impacts to riparian/riverine resources habitat to allow construction equipment access to within the channel (Table 2; Appendix B – Figure 5). The temporary impacts proposed within French Valley Creek include vegetation clearing and light grading and soil compaction which will allow for equipment access within the creek during construction. Equipment access is needed to install bridge piers and abutments. No other impacts are anticipated as a result of this Project.

Avoidance and minimization measures will be implemented to preserve the existing riparian/riverine resources and to reduce potential impacts resulting from the execution of this Project. Refer to Chapter 2.6 Avoidance and Minimization Measures for a complete list of the avoidance and minimization measures proposed for this Project. Permanent impacts associated with this Project are projected to be limited, and temporary impacts within the Project area will be restored to pre-construction conditions. Therefore, the Project is not anticipated to notably impact the overall function of the riparian corridor. 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. This will accommodate passage for wildlife and preserve the channel's function as a migration corridor, including for larger mammals such as mule deer. Additionally, the bridge piers are not anticipated to impede aquatic flow within the channel due to their limited scope. Temporary impacts within the Project area will be revegetated with a native seed mix to maintain the populations of native plant communities as well as reducing the opportunity for invasive plant growth.

5.1.4 Mitigation

The Project proposes a pedestrian bridge crossing that passes perpendicularly through French Valley Creek. As such, riparian/riverine resources within French Valley Creek in the Project area will be impacted due to Project construction. The Project is anticipated to exceed the permitted 10% impacts to habitat valued for long-term conservation. Therefore, a DBESP Report is necessary to outline equivalent or superior conservation of habitat elsewhere as a function of Project mitigation. The DBESP includes a discussion of proposed mitigation for the Project; a summary of this discussion is included below.

Due to the Project's proposed impacts to riparian/riverine resources 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 to

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establish willow scrub riparian, emergent wetland, and alkali salt marsh habitat at a nearby off-site location (Appendix B – Figure 7. Proposed Mitigation Site). A Habitat Mitigation and Monitoring Plan (HMMP) detailing the proposed mitigation will be prepared for the on- and off-site mitigation areas and will be reviewed and approved by the RCA and wildlife agencies (including USFWS and CDFW) prior to Project implementation (including vegetation removal, staging equipment, and ground disturbance). Mitigation efforts are designed with the objective of providing benefits that are biologically equivalent or superior to that which will 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 2.

Table 2 outlines the required mitigation accounting for proposed mitigation ratios for all riparian/riverine habitat resources within the Project area. Temporary impacts would be mitigated at a 1:1 ratio. Temporary impacts to conservation easement lands would be mitigated at a 2:1 ratio. Shade impacts will be mitigated at a 3:1 ratio. Furthermore, permanent impacts will also be mitigated for at a 3:1 ratio. It is anticipated that the Project will require a total of 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 will 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. 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. Based on a site visit conducted on February 2, 2022, the habitat mitigation activities will, at a minimum, consist of initial invasive and non-native species removal, seeding with a native seed palette, 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/creation 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 HMMP design, including hydraulic and soil analysis. The results of these investigations would determine the details of the final HMMP; however, the County commits to provide mitigation for alkali saltmarshes, emergent wetlands, and willow scrub in kind, as appropriate throughout the mitigation site. 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 will complete re-establishment of all temporary impact areas (0.530 acres) on-site as a part of the overall Project mitigation effort. The 0.530 acres of on-site mitigation will 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 (Table 2). On-site re-establishment will occur under the same principles of the off-site mitigation project, and include site preparation, seeding with a native seed palette, 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

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will be protected in place and natural recruitment is expected to be high. On-site re-establishment activities will provide benefits to the temporarily impacted areas that are equivalent or superior to that which will occur if effects to the riparian/riverine resources in these areas were avoided. 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.

5.2 Vernal Pools

5.2.1 Methods

A general biological survey was completed by Dokken biologist Scott Salembier on July 24, 2019. During this survey, general habitat types and dominant species within the creek corridor were observed, recorded, and photographed. Additionally, a field investigation conducted in 2020 by Power Engineers' biologists identified the presence of potential jurisdictional wetlands and waterways within and in the vicinity of the Project area. USACE and CDFW guidance were used to determine the jurisdictional boundaries of WOUS and WOS within the Project area.

5.2.2 Existing Conditions and Results

The biological surveys conducted in 2019 and 2020 by Dokken and POWER Engineers did not identify any vernal pools within or in the vicinity of the Project site. The soil type found within the Project site is drained Chino silt loam, which is a saline-alkali soil type that does not create suitable conditions for vernal pool formation. In addition, the majority of herbaceous cover indicated within the Project area was indicative of a scrub riparian habitat, and vernal pool indicator plant species were not observed. Vernal pools are presumed absent from the Project area.

5.2.3 Impacts

No direct effects to vernal pools are expected as a result of the construction of this Project.

5.2.4 Mitigation

Not applicable.

5.3 Fairy Shrimp

The Project does not contain vernal pool habitat or other habitat types suitable for fairy shrimp. The nearest occurrence of fairy shrimp found on the California Natural Diversity Database is approximately 3 miles south of the Project.

5.3.1 Methods

A general biological survey was completed by Dokken biologist Scott Salembier on July 24, 2019. During this survey, general habitat types and dominant species within the creek corridor were observed, recorded, and photographed. Additionally, a field investigation conducted in 2020 by Power Engineers' biologists identified the presence of potential jurisdictional wetlands and waterways within and in the vicinity of the Project area.

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5.3.2 Existing Conditions and Results

The biological surveys conducted in 2019 and 2020 by Dokken and POWER Engineers did not identify any vernal pools or other suitable habitat features for fairy shrimp within or in the vicinity of the Project site. The soil type found within the Project site is drained Chino silt loam, which is a saline-alkali soil type that does not create suitable conditions for vernal pool formation. In addition, the majority of herbaceous cover within the Project area is indicative of a scrub riparian habitat, and vernal pool indicator plant species were not observed. No indicators of ponding or other habitat types were identified within the Project area that will potentially suit the habitat requirements for fairy shrimp. Fairy shrimp are presumed absent from the Project area.

5.3.3 Impacts

No direct effects to fairy shrimp are expected as a result of the construction of this Project.

5.3.4 Mitigation

Not applicable.

5.4 Riparian Birds

5.4.1 Methods

In addition to the general biological surveys conducted on-site and described in earlier sections, Busby Biological Services conducted focused surveys in accordance with the MSHCP to identify occurrences of least Bell's vireo (LBV; *Vireo bellii pusillus*), southwestern willow flycatcher (SWFL; *Empidonax traillii extimus*), yellow-billed cuckoo (YBCU; *Coccyzus americanus*), and riparian/riverine habitat resources within the Project area. The survey area included a 330-foot buffer from the proposed Project site in order to capture and evaluate suitable off-site habitat conditions.

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 will 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. No more than approximately 3 linear kilometers (50 hectares) of suitable habitat were surveyed per day, per the protocol.

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

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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 will 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 the 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.

5.4.2 Existing Conditions and Results

Willow riparian scrub and emergent wetlands were determined to be the riparian/riverine resources within the Project area that serve as suitable nesting and foraging habitat for riparian birds. Dense stands of arroyo willow (*Salix lasiolepis*) and cattail (*Typha sp.*) provide potential nesting sites and foraging habitat for migratory birds. Willow scrub riparian habitat within the Project area is considered suitable nesting and foraging habitat, and emergent wetland is considered foraging habitat. No other habitat types within the Project area are considered suitable nesting or foraging habitat for these riparian bird species. Willow scrub riparian and emergent wetland communities comprise approximately 0.664 acres of 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 A).

During the 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 A).

5.4.3 Impacts

Geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.063 acres of emergent wetland habitat and 0.055 acres of willow scrub riparian habitat (Appendix B – Figure 6). However, these impacts are located entirely within the temporary impact and shade impact

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areas for the pedestrian bridge proposed by the Project and geotechnical borings will be backfilled according to industry standard practice to protect groundwater resources. 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.

Project impacts to potential riparian bird habitat will include approximately 0.007 acres of permanent impacts to emergent wetland (foraging) habitat and 0.029 acres of permanent impacts to willow riparian scrub (nesting/foraging) habitat via the installation of the pedestrian bridge piers. An additional 0.152 acres of permanent shade impacts to emergent wetland (foraging) habitat and 0.077 acres 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; Appendix B – Figure 5). No other impacts are anticipated as a result of this Project.

Avoidance and minimization measures will be implemented to preserve the existing riparian habitat community adjacent to the Project limits and to reduce potential impacts to riparian avian species resulting from the execution of this Project. Refer to Chapter 2.6 for a complete list of the avoidance and minimization measures proposed for this Project. Permanent impacts associated with this Project are projected to be limited, and temporary impacts within the Project area will be restored to pre-construction conditions. This includes a native seed revegetation effort to maintain the populations of native riparian plant communities and provide continuing habitat for these riparian bird species. Therefore, the Project is not anticipated to notably impact the provision of suitable habitat for riparian birds.

The Project does require the temporary removal of riparian vegetation. In accordance with the MSHCP, a pre-construction survey will be conducted prior to construction in order to document nesting behavior, identify existing nests, and determine the distance of any potential exclusion buffers. A description of pre-construction survey procedures is outlined in the Project's avoidance and minimization measures (see Chapter 2.6). Take of occupied habitat during breeding season is prohibited.

5.4.4 Mitigation

Avoidance and minimization measures will be implemented to preserve the existing riparian/riverine habitat for nesting and foraging birds and to reduce potential impacts resulting from the execution of this Project. Refer to Chapter 2.6 for a complete list of the avoidance and minimization measures proposed for this Project. Permanent impacts associated with this Project are projected to be limited, and temporary impacts within the Project area will be re-established to pre-construction conditions. Therefore, the Project is not anticipated to notably impact the overall function of the riparian corridor.

However, since riparian/riverine resources within French Valley Creek in the Project area will be impacted due to Project construction and the Project is anticipated to exceed the permitted 10% impacts to habitat valued for long-term conservation, a DBESP Report is necessary to outline equivalent or superior conservation of habitat elsewhere as a function of Project mitigation. The DEBESP includes a

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discussion of proposed mitigation for the Project; a summary of this discussion is included in Chapter 5.1.4 of this document (Appendix B – Figure 7). The proposed mitigation will 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. Therefore, with mitigation, the Project is not anticipated to notably impact the provision of suitable habitat for riparian birds.

5.5 Other Section 6.1.2 Species

In addition to fairy shrimp and riparian birds, the MSCHP outlines several other plant and wildlife species that benefit from the protection and preservation of riparian/riverine areas. To ensure that the biological functions and values of sensitive habitat communities are maintained such that value is maintained for all species, it is necessary to discuss the potential for the Project to affect the species listed in Section 6.1.2 (Vol. I.) of the MSHCP. Table 7. Potential for Section 6.1.2 Species acknowledges these species below. Three Section 6.1.2 species have the potential to occur within the Project area: LBV, SWFL, and smooth tarplant. Both riparian bird species were discussed previously in this section. Potential Project impacts to smooth tarplant are explored in Chapter 7.1 of this document. Due to the extended discussion of these species elsewhere in the document, avoidance and minimization measures and Project mitigation are sufficiently designed to preserve sensitive habitat features of these species. As such, no additional discussion of Section 6.1.2 species is necessary.

Table 7. Potential for Section 6.1.2 Species

| Species | Potential for Species Presence |
|---|---|
| Amphibians | |
| Arroyo toad <i>Anaxyrus californicus</i> | Absent: The Project area does not occur in the foothills and lacks suitable foothill-riparian habitat (CNDDDB 2021; CDFW 2005). |
| Mountain yellow-legged frog <i>Rana muscosa</i> | Absent: The Project area is over 4500 feet below the estimated elevational range of this species (CDFW 2021). |
| California red-legged frog <i>Rana draytonii</i> | Absent: The Project area lacks sufficient permanent water sources to support this species (CDFW 2008b). |
| Birds | |
| Bald eagle <i>Haliaeetus leucocephalus</i> | Absent: The Project area lacks large bodies of water for foraging and does not encompass large nesting trees (CDFW 1999a). |
| Least Bell’s vireo <i>Vireo belli pusillus</i> | Present: The Project area includes suitable habitat, and a single individual of the species was observed within the project vicinity (Appendix A). |
| Peregrine falcon <i>Falco peregrinus</i> | Absent: The Project area lacks suitable high cliffs or banks for nesting and lacks suitable woodland or forest habitat (CDFW 1990c). |
| Southwestern willow flycatcher <i>Empidonax traillii extimus</i> | High Potential: The Project area includes suitable habitat, and the species was potentially observed on-site (Appendix A). |

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| Species | Potential for Species Presence |
|--|--|
| Yellow-billed cuckoo <i>Coccyzus americanus</i> | Absent: The Project area includes willows but lacks the extensive, dense riparian forest associated with this species (CDFW 1999b). |
| Fish | |
| Santa Ana sucker <i>Catostomus santaanae</i> | Absent: The Project area contains an intermittent stream that could not support this aquatic species (Calfish 2021). |
| Invertebrates/Crustaceans | |
| Riverside fairy shrimp <i>Streptocephalus woottoni</i> | Absent: The Project area lacks suitable vernal pool communities to sustain this species. |
| Vernal pool fairy shrimp <i>Branchinecta lynchi</i> | Absent: The Project area lacks suitable vernal pool communities to sustain this species. |
| Plants | |
| Brand's phalecia <i>Phacelia stellaris</i> | Absent: The Project area does not include coastal scrub or coastal dune communities (CNPS 2021). |
| California Orcutt grass <i>Orcuttia californica</i> | Absent: The Project area lacks suitable vernal pool habitat (CNPS 2021). |
| California black walnut <i>Juglans californica</i> | Absent: The Project area includes wetland-riparian habitat but lacks a woodland community (CNPS 2021). |
| Coulter's matilija poppy <i>Romneya coulteri</i> | Absent: The Project area lacks coastal sage scrub or chaparral habitat (CNPS 2021). |
| Engelmann oak <i>Quercus engelmannii</i> | Absent: The Project area does not encompass foothill woodland, chaparral, or valley grassland communities (CNPS 2021). |
| Fish's milkwort <i>Polygala cornuta var. fishiae</i> | Absent: The project area is outside of the known range of the species which is confined to the coastal mountain ranges (CNPS 2021). |
| Graceful tarplant <i>Holocarpha virgata ssp. elongata</i> | Absent: The project area is outside of the known range of the species which is confined to the coastal mountain ranges (CNPS 2021). |
| Lemon lily <i>Hemerocallis lilioasphodelus</i> | Absent: The Project area is 2,600 feet below the accepted elevation range of this species (CNPS 2021). |
| Mojave tarplant <i>Deinadra mohavensis</i> | Absent: The Project area is 800 feet below the accepted elevation range of this species (CNPS 2021). |
| Mud nama <i>Nama stenocarpa</i> | Absent: This species does not tolerate high-saline conditions that are present on-site (CNPS 2021). |
| Ocellated Humboldt lily <i>Lilium humboldtii ssp. ocellatum</i> | Absent: The Project area is outside of the known range of the species which is confined to the San Gabriel and San Bernardino Mountains and the coastal ranges (CNPS 2021). |
| Orcutt's brodiaea <i>Brodiaea orcutti</i> | Absent: The Project area lacks suitable meadow or vernal pool habitat (CNPS 2021). |
| Parish's meadowfoam <i>Limnanthes alba ssp. parishii</i> | Absent: The Project area is 2000 feet below the suitable elevational range for this species (CNPS 2021). |
| Prostrate navarretia <i>Navarretia prostrata</i> | Absent: The Project area lacks suitable vernal pool habitat and occurrences are limited to the Santa Ana Mountains (CNPS 2021). |

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| Species | Potential for Species Presence |
|--|--|
| San Diego button-celery <i>Eryngium aristulatum</i> var. <i>parishii</i> | Absent: The Project area lacks suitable vernal pool or freshwater marsh habitat (CNPS 2021). |
| San Jacinto Valley crownscale <i>Atriplex coronata</i> var. <i>notatior</i> | Absent: Occurrences of this species are limited to the San Jacinto Valley and north of Diamond Valley Lake (CNPS 2021). |
| San Miguel savory <i>Clinopodium chandleri</i> | Absent: The Project area lacks suitable coastal sage scrub, chaparral, foothill woodland, or valley grassland habitat (CNPS 2021). |
| Santa Ana River woolly-star <i>Eriastrum densifolium sanctorum</i> | Absent: The Project area lacks coastal scrub and chaparral communities suitable for this species (CNPS 2021). |
| Slender-horned spine flower <i>Dodecahema leptoceras</i> | Absent: The Project area lacks coastal scrub and chaparral communities suitable for this species (CNPS 2021). |
| Smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i> | High Potential: The Project area contains suitable alkaline soils and riparian habitat, and individuals of this species were observed during surveys (CNPS 2021, Appendix B). |
| Spreading navarretia <i>Navarretia fossalis</i> | Absent: The Project area lacks suitable freshwater marsh or swamp habitat (CNPS 2021). |
| Thread-leaved brodiaea <i>Brodiaea filifolia</i> | Absent: The Project area lacks suitable vernal pool, chaparral, grassland, or coastal sage scrub habitat (CNPS 2021). |
| Vernal barley <i>Hordeum intercedens</i> | Absent: The Project area lacks suitable salt flats or vernal depressions for this species to propagate (CNPS 2021). |

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6 PROTECTION OF NARROW ENDEMIC PLANT SPECIES (SECTION 6.1.3)

Projects located within a mapped Narrow Endemic Plant Species survey area are subject to additional site-specific surveys and procedures in order to achieve coverage for these species as outlined in Section 6.3.2 (Vol. I.) of the MSHCP.

6.1 Narrow Endemic Plant Species

The proposed Project is located within Narrow Endemic Plant Species Survey Area 4, which includes the following species:

- Munz's onion (*Allium munzii*)
- California Orcutt grass (*Orcuttia californica*)
- San Diego ambrosia (*Ambrosia pumila*)
- Many-stemmed dudleya (*Dudleya multicaulis*)
- Spreading navarretia (*Navarretia fossalis*)
- Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*)

6.1.1 Methods

In order to assess the local habitat suitability for each Narrow Endemic species, the Project area was evaluated for the presence of suitable soils, habitat communities, elevation, topography, and recent local occurrences within or in the vicinity of the Project site. Habitat assessments and botanical surveys for the six NEPSSA 4 species listed above were by conducted POWER Engineers biologists on April 22 and June 9, 2020. These survey dates encompass the blooming periods of the six Narrow Endemic Plant species identified by the MSHCP as having the potential to occur within the NEPSSA 4. Botanical surveys were conducted within the Project area footprint within French Valley Creek, plus an additional approximate 50-foot buffer. During the surveys, habitat communities were identified and described, and all plant species within the survey area were identified to species level. The year 2020 was a drought year with significantly less rainfall than the state average (NIDIS 2021); however, the surveys conducted during 2020 are not anticipated to be influenced by drought conditions due to the overall lack of suitable habitat features, specifically suitable soil types and vernal pool features, within the Project area for Narrow Endemic Plant species listed above.

6.1.2 Existing Conditions and Results

Habitat assessments determined that the Project area does not include suitable habitat features, such as clay soils and vernal pools, for the following Narrow Endemic Plant species: Munz's onion, California

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Orcutt grass, and many-stemmed dudleya. Due to the negative survey results, the lack of suitable habitat features, and the lack of local occurrences, these three NEPSSA 4 species are presumed absent from the Project area.

San Diego ambrosia, spreading navarretia, and Wright's trichocoronis were not observed within the Project area during the botanical surveys; however, these species are often associated with alkaline soils and wetland habitats, which are present within the Project area. Despite the negative survey results and the lack of local occurrences for these three species, it was determined that San Diego ambrosia, spreading navarretia, and Wright's trichocoronis have a low to moderate potential to occur within the Project area.

The evaluations for each species are detailed in Table 8. Habitat Suitability for Narrow Endemic Plant Species.

Table 8. Habitat Suitability for Narrow Endemic Plant Species

| Common Name/ Scientific Name | General Habitat Description | Rationale |
|--|---|--|
| Munz's onion <i>Allium munzii</i> | 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. Flowers April-May (980-2,950 feet). | Presumed Absent: The Project area contains clay soils; however, the Project area does not contain any of the suitable habitat community types associated with this species. The nearest CNDDDB occurrence 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 potentially suitable habitat. |
| California Orcutt grass <i>Orcuttia californica</i> | An annual herb inhabiting vernal pool communities. Flowers April-August (50-2,200 feet). | Presumed Absent: The nearest CNDDDB occurrence of the species is approximately 3.12 miles south of the Project area (1991). The Project area lacks vernal pool habitat; therefore, the species is presumed absent due to the lack of potentially suitable habitat. |
| San Diego ambrosia <i>Ambrosia pumila</i> | A perennial rhizomatous herb inhabiting sandy loams, clay, and occasionally alkaline soils within chaparral, coastal scrub, valley and foothill grassland, freshwater wetlands, and vernal pool communities. Flowers April-October (65-1,360 feet). | Low to Moderate Potential: The nearest CNDDDB occurrence of the species is approximately 3 miles south of the Project area (2017). However, the Project area contains alkaline soils and wetland communities, and the species has a low to moderate potential to occur. |
| Many-stemmed dudleya <i>Dudleya multicaulis</i> | A perennial herb often found within clay and heavy soils of chaparral, coastal scrub, valley and foothill | Presumed Absent: The nearest CNDDDB occurrence of the species is over 10 miles from the Project area and was |

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| Common Name/ Scientific Name | General Habitat Description | Rationale |
|--|--|---|
| | grassland communities. Flowers April-July (50-2,600 feet). | recorded in the 1990s. Furthermore, the Project area lacks heavy clay soils, as well as chaparral, coastal scrub, valley and foothill grassland communities; therefore, the species is presumed absent. |
| Spreading navarretia (<i>Navarretia fossalis</i>) | An annual herb inhabiting vernal pools, chenopod scrub, playas, riparian, and shallow freshwater marsh and swamp communities. Flowers April-June (100-4,300 feet). | Low to Moderate Potential: The nearest CNDDDB occurrence of the species is approximately 2.9 miles west of the Project area (1922). However, there are several other occurrences of the species within 3 miles of the Project area. Furthermore, the Project area contains shallow wetland and marsh communities and riparian habitat, and the species has a low to moderate potential to occur. |
| Wright's trichocoronis (<i>Trichocoronis wrightii</i> var. <i>wrightii</i>) | An annual herb found most often in marshes, swamps, meadows, vernal pools, and riparian habitat. Flowers May-September (30-1,500 feet). | Low to Moderate Potential: The species only has 4 reported CNDDDB occurrences within Riverside County, which are approximately 15 miles from the Project; however, the Project area contains marsh, wetland, and riparian habitats suitable for the species. The species has a low to moderate potential to occur. |

6.1.3 Impacts

The Project is anticipated to temporarily impact approximately 0.067 acres of alkali salt marsh and 0.177 acres of emergent wetland habitats, which may be suitable habitat for the NEPSSA 4 species that have the potential to occur within the Project area. The Project is also anticipated to have permanent impacts of 0.009 acres to alkali salt marsh and 0.007 acres to emergent wetland. Shade impacts are anticipated to be approximately 0.091 acres to alkali salt marsh and 0.152 acres to emergent wetland. Project impacts to suitable habitat for NEPSSA 4 species are anticipated to exceed the permitted 10% threshold for impacts. Therefore, the Project requires equivalent or superior conservation of habitat elsewhere as a function of Project mitigation.

Preliminary geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.076 acres of alkali marsh habitat and 0.063 acres of emergent wetland habitat. However, these impacts are located entirely within the temporary impact areas for the pedestrian bridge proposed by the Project and geotechnical borings will be backfilled according to industry standard practice to protect groundwater resources. Mitigation for temporary impacts associated with the

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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.

6.1.4 Mitigation

Three NEPSSA 4 species have a low to moderate potential to occur within the Project area. Botanical surveys conducted in the spring of 2020 produced negative results for these species; however, annual and short-lived perennial plants may require updated surveys immediately prior to construction to accurately detect presence. With the implementation of BIO-6 and the other avoidance and minimization measures listed within Chapter 2.6, direct effects to these species will be avoided and minimized.

As the Project will have impacts to riparian/riverine resources within the Project area that may serve as suitable habitat for the NEPSSA 4 species, and the Project is anticipated to exceed the permitted 10% impacts to habitat valued for long-term conservation, a DBESP Report is necessary to outline equivalent or superior conservation of habitat elsewhere as a function of Project mitigation. The DBESP includes a full discussion of proposed mitigation for the Project; a summary of this discussion is included in Chapter 5.1.4 of this document as well.

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7 ADDITIONAL SURVEY NEEDS AND PROCEDURES (SECTION 6.3.2)

Projects located within a mapped Criteria Area Plant Species survey area are subject to additional site-specific surveys and procedures in order to achieve coverage for these species as outlined in Section 6.3.2 (Vol. I.) of the MSHCP.

7.1 Criteria Area Plant Species

The proposed Project is located within Criteria Area Plant Species Survey Area 4, which includes the following species:

- Coulter's goldfields (*Lasthenia glabrata ssp. coulteri*)
- Davidson's saltscale (*Atriplex serenana var. davidsonii*)
- Little mousetail (*Myosurus minimus ssp. apus*)
- Mud nama (*Nama stenocarpa*)
- Parish's brittlescale (*Atriplex parishii*)
- Round-leaved filaree (*Erodium macrophyllum*)
- Smooth tarplant (*Centromadia pungens ssp. laevis*)
- Thread-leaved brodiaea (*Brodiaea filifolia*)

7.1.1 Methods

In order to assess the local habitat suitability for each Criteria Area Plant species, the Project area was evaluated for the presence of suitable soils, habitat communities, elevation, topography, and recent local occurrences within or in the vicinity of the Project site. On-site habitat assessments were conducted by POWER Engineers biologists on April 22 and June 9, 2020. These survey dates encompass the blooming period of the Criteria Area plant species identified by the MSHCP as having the potential to occur on-site. 2020 was a drought year with significantly less rainfall than the state average (NIDIS 2021); however, the surveys conducted during 2020 are not anticipated to be influenced by drought conditions due to the overall lack of suitable habitat features within the Project area for 6 of the 8 Criteria Area plant species listed above.

7.1.2 Existing Conditions and Results

The habitat assessments determined that the Project area does not include suitable habitat features for 6 of the 8 listed Criteria Area species. Two of the species, Coulter's goldfields and smooth tarplant, were determined to have a high potential of occurring within the Project area (Appendix B – Figure 9. Criteria Area Species: Habitat Evaluation). The presence of suitable habitat features as well as a recent local CNDDDB occurrence indicates that Coulter's goldfields have a high potential to occur within the Project area. Additionally, 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. Assessments for each species are outlined in the Table 9. Habitat Suitability for Criteria Area Plant Species, included below:

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Table 9. Habitat Suitability for Criteria Area Plant Species

| Common Name/ Scientific Name | General Habitat Description | Rationale |
|--|---|---|
| Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i> | An annual herb inhabiting playas, coastal salt marshes, swamps, and vernal pool communities. Flowers from February-June (0-4,000 feet). | High Potential: The nearest CNDDDB 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 high potential to occur within the Project area. |
| Davidson's saltscale <i>Atriplex serenana</i> var. <i>davidsonii</i> | An annual herb inhabiting alkaline bluffs of coastal bluff scrub or coastal scrub communities. Flowers April-October (30-660 feet). | Presumed Absent: The Project area lacks coastal habitats and landforms and is outside of the species' elevation range. Additionally, there is only one nearby CNDDDB 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. |
| Little mousetail <i>Myosurus minimus</i> ssp. <i>apus</i> | An annual herb inhabiting alkaline soils in valley and foothill grassland vernal pool communities. Flowers March-June (65-2,100 feet). | Presumed Absent: The Project area contains alkaline soils but lacks vernal pools. The nearest CNDDDB 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. |
| Mud nama <i>Nama stenocarpa</i> | An annual or perennial herb inhabiting intermittently wet areas including marshes, swamps, lake margins and riverbanks. Flowers January-July (15-1,640 feet). | 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 CNDDDB. 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. |

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| Common Name/ Scientific Name | General Habitat Description | Rationale |
|---|--|--|
| Parish's brittle-scale <i>Atriplex parishii</i> | An annual herb inhabiting alkaline or clay soils of chenopod scrub, playas, or vernal pool communities. Flowers June-October (80-6,230 feet). | Presumed Absent: The Project area contains alkaline and clay soils but lacks vernal pool communities. The nearest CNDDDB 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. |
| Round-leaved filaree <i>Erodium macrophyllum</i> | 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). | 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. |
| Smooth tarplant <i>Centromadia pungens ssp. laevis</i> | 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). | High Potential: The Project area contains alkaline soils and riparian habitat. The nearest CNDDDB occurrence of the species is approximately 0.43 miles southwest of the Project area (2011), and the species 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. |
| Thread-leaved brodiaea <i>Brodiaea filifolia</i> | 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). | Presumed Absent: The Project area contains clay soils, but lacks vernal pools, chaparral, grassland, and coastal scrub. The nearest CNDDDB 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. |

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7.1.3 Impacts

The Project is anticipated to impact potentially suitable habitat for two Critical Area Plant species – Coulter’s goldfields and smooth tarplant. The Project is anticipated to temporarily impact approximately 0.067 acres and permanently impact approximately 0.100 acres of alkali marsh habitat.

Additionally, a population 25 smooth tarplant individuals were observed on the northwest side of the channel, just outside of the Project area (Appendix B – Figure 9). Smooth tarplant is known to occur within alkaline soils within riparian communities. As the location of this identified population is outside of the Project impact area, direct impacts to the species will be avoided. However, the Project is anticipated to temporarily impact approximately 0.286 acres and permanently impact approximately 0.106 acres of willow scrub riparian habitat that is suitable for the species.

Preliminary geotechnical investigations for the Project are anticipated to have temporary impacts to approximately 0.076 acres of alkali marsh habitat and 0.055 acres of willow scrub riparian habitat (Appendix B – Figure 6). However, these impacts are located entirely within the temporary impact areas for the pedestrian bridge proposed by the Project and geotechnical borings will be backfilled according to industry standard practice to protect groundwater resources. Mitigation for temporary impacts associated with the geotechnical investigations will be compensated for with the proposed bridge project mitigation; as such, no additional compensatory mitigation for the geotechnical investigation is proposed.

No changes in local hydrology are anticipated as a result of this Project. Temporarily impacted areas will be returned to their pre-construction conditions.

7.1.4 Mitigation

To avoid the potential for Project impacts, avoidance and minimization measures will be implemented throughout the Project (see Chapter 2.6 for a full list of Project avoidance and minimization measures). Project limits within French Valley Creek will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach on Criteria Area Plant species habitat and identified populations. Furthermore, due to the presence of potentially suitable habitat for Coulter’s goldfields as well as the positive detection of smooth tarplant during initial biological surveys, a protocol-level botanical survey will be required prior to construction in order to detect the potential presence of local special status plant species within the Project’s impact area (see BIO-6 in Chapter 2.6). The survey will be conducted during the appropriate blooming season when special status plants are more likely to be encountered. Surveys should be conducted in accordance with accepted botanical survey protocols including USFWS (2002) and CDFW (2009). The appropriate blooming season for Coulter’s goldfields is between February and June. Smooth tarplant blooms between April and November.

As the Project will have impacts to suitable habitat for CASSA 4 species, and the Project is anticipated to exceed the permitted 10% impacts to habitat valued for long-term conservation, a DBESP Report is necessary to outline equivalent or superior conservation of habitat elsewhere as a function of Project

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mitigation. The DBESP includes a full discussion of proposed mitigation for the Project; a summary of this discussion is included in Chapter 5.1.4 of this document as well.

7.2 Amphibians

The Project area is not within a mapped amphibian survey area, the closest of which is approximately 8 miles southwest of the Project area.

7.2.1 Methods

Not applicable.

7.2.2 Existing Conditions and Results

Not applicable.

7.2.3 Impacts

Not applicable.

7.2.4 Mitigation

Not applicable.

7.3 Burrowing Owl

The proposed Project is within the mapped survey area for burrowing owl (*Athene cunicularia*). A burrowing owl habitat assessment was carried out within the Project area by Dokken biologist Scott Salembier on July 24, 2019. During this assessment, it was observed that habitats within the Project area, including French Valley Creek and the associated riparian corridor, are too densely vegetated to provide suitable habitat for burrowing owl, which typically prefer open areas away from tall trees and buildings. Potentially suitable undeveloped sparsely vegetated lands were present north of the Project area between Highway 79 and French Valley Creek north of Skyview Road; however, a public library has been constructed in this location and the Project area is now isolated from potentially suitable habitat for burrowing owl. Power Engineers biologists conducted additional general biological surveys on April 22, 2020 and June 9, 2020; both surveys concurred that there is no suitable burrowing owl habitat present within or adjacent to the survey area.

Based on a lack of suitable habitat for the species within or adjacent to the Project area, burrowing owl is presumed absent and focused burrowing owl surveys are not needed.

7.3.1 Methods

Not applicable.

7.3.2 Existing Conditions and Results

Not applicable.

7.3.3 Impacts

Not applicable.

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7.3.4 Mitigation

Not applicable.

7.4 Mammals

The Project is not within a mapped survey area for mammal species. The nearest mammal survey area is approximately 1.7 miles west of the Project area.

7.4.1 Methods

Not applicable.

7.4.2 Existing Conditions and Results

Not applicable.

7.4.3 Impacts

Not applicable.

7.4.4 Mitigation

Not applicable.

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8 INFORMATION ON OTHER SPECIES

8.1 Delhi Sands Flower Loving Fly

The Project is approximately 32 miles from the nearest mapped Delhi soils.

8.1.1 Methods

Not applicable.

8.1.2 Existing Conditions and Results

Not applicable.

8.1.3 Impacts

Not applicable.

8.1.4 Mitigation

Not applicable.

8.2 Species Not Adequately Conserved

The Project area does not support habitat for any of the 28 species included in Table 9-3 of the MSHCP. Table 10. Potential for Species Not Adequately Conserved, included below, describes rationale for each species being presumed absent from the Project area.

Table 10. Potential for Species Not Adequately Conserved

| Common Name/Scientific Name | Potential for Species Presence |
|--|--|
| Reptiles | |
| San Bernardino mountain kingsnake <i>Lampropeltis zonata parvirubra</i> | Absent. The Project area is located outside of the species' established range (Herp 2021a). |
| San Diego mountain kingsnake <i>Lampropeltis zonata pulchra</i> | Absent. The Project area is located outside of the species' established range (CDFG 2012). |
| southern rubber boa <i>Charina bottae umbratical</i> | Absent. The Project area is located outside of the species' established range (CDFW 2012). |
| southern sagebrush lizard <i>Sceloporus graciosus vandenburgianus</i> | Absent. The Project area is located outside of the species' established range (Herp 2021b). |
| Birds | |
| California spotted owl <i>Strix occidentalis occidentalis</i> | Absent. The Project area is located outside of the species' established range (CDFW 2008c). |
| Grasshopper sparrow <i>Ammodramus savannarum</i> | Absent. The Project area does not contain dry grasslands, which are a common requisite for this species (CDFW 2008a). |
| Lincoln's sparrow (breeding) <i>Melospiza lincolni</i> | Absent. The Project area does not fall within the higher mountain breeding range of this species (CDFW 1995a). |
| Williamson's sapsucker <i>Sphyrapicus thyroideus</i> | Absent. The Project area is located outside of the species' established range (CDFW 1995b). |

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| Common Name/Scientific Name | Potential for Species Presence |
|---|--|
| Mammals | |
| San Bernardino flying squirrel <i>Glaucomys sabrinus californicus</i> | Absent. The Project area is located outside of the species' established range (CDFG 1998). |
| Plants | |
| beautiful hulsea <i>Hulsea vestita</i> ssp. <i>callicarpa</i> | Absent. Project area is 1,600 feet below the accepted elevation range of this species (CNPS 2021). |
| California bedstraw <i>Galium californicum</i> ssp. <i>primum</i> | Absent. Project area is 3,100 feet below the accepted elevation range of this species (CNPS 2021). |
| California muhly <i>Muhlenbergia californica</i> | Absent. Project area is outside of the known range of the species which is confined to the San Gabriel and San Bernardino Mountains and their foothills (CNPS 2021). |
| chickweed oxytheca <i>Oxytheca caryophylloides</i> | Absent. Project area is 2,300 feet below the accepted elevation range of this species (CNPS 2021). |
| Cleveland's bush monkeyflower <i>Mimulus clevelandii</i> | Absent. Project area is outside of the known range of the species which is confined to the coastal mountain ranges (CNPS 2021). |
| cliff cinquefoil <i>Potentilla rimicola</i> | Absent. Project area is 6,500 feet below the accepted elevation range of this species (CNPS 2021). |
| Coulter's matilija poppy <i>Romneya coulteri</i> | Absent. The project area does not contain chaparral or coastal scrub habitat associated with the species. (CNPS 2021). |
| Fish's milkwort <i>Polygala cornuta</i> var. <i>fishiae</i> | Absent. The project area is outside of the known range of the species which is confined to the coastal mountain ranges (CNPS 2021). |
| graceful tarplant <i>Holocarpha virgata</i> ssp. <i>elongata</i> | Absent. The project area is outside of the known range of the species which is confined to the coastal mountain ranges (CNPS 2021). |
| lemon lily <i>Lilium parryi</i> | Absent. Project area is 2,600 feet below the accepted elevation range of this species (CNPS 2021). |
| Mojave tarplant <i>Deinandra mohavensis</i> | Absent. Project area is 800 feet below the accepted elevation range of this species (CNPS 2021). |
| ocellated Humboldt lily <i>Lilium humboldtii</i> ssp. <i>ocellatum</i> | Absent. The project area is outside of the known range of the species which is confined to the San Gabriel and San Bernardino Mountains and the coastal ranges (CNPS 2021). |
| Parry's spine flower <i>Chorizanthe parryi</i> var. <i>parryi</i> | Absent. The project area does not contain chaparral or coastal scrub habitat associated with the species. (CNPS 2021). |
| Peninsular spine flower <i>Chorizanthe leptotheca</i> | Absent. The Project area does not contain coastal sage scrub, yellow pine forest, or chaparral habitat associated with this species (CNPS 2021). |
| Plummer's mariposa lily <i>Calochortus plummerae</i> | Absent. The Project area does not contain coastal sage scrub, yellow pine forest, foothill woodland, chaparral, or valley grassland habitat associated with this species (CNPS 2021). |
| Rainbow manzanita <i>Arctostaphylos rainbowensis</i> | Absent. The Project area is outside of the known range of the species which is concentrated near Temecula and within the Santa Ana Mountains (CNPS 2021). |

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| Common Name/Scientific Name | Potential for Species Presence |
|--|--|
| shaggy-haired alumroot <i>Heuchera hirsutissima</i> | Absent. The Project area is outside of the known range of the species which is confined to Mt. San Jacinto and its associated mountain range (CNPS 2021). |
| small-flowered microseris <i>Microseris douglasii</i> var. <i>platycarpha</i> | Absent. The Project area does not contain coastal sage scrub, foothill woodland, or valley grassland habitat associated with this species (CNPS 2021). |
| sticky-leaved dudleya <i>Dudleya viscida</i> | Absent. The Project area does not contain coastal sage scrub or chaparral habitat associated with this species (CNPS 2021). |

No additional discussion concerning these 28 species, or their specific Species Objectives, are necessary due to their presumed absence from the Project area.

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9 GUIDELINES PERTAINING TO THE URBAN/WILDLANDS INTERFACE (SECTION 6.1.4)

To preserve the integrity of areas described as existing or future MSHCP Conservation Areas, the guidelines contained in Section 6.1.4 (Vol. I.) Urban Wildlands Interface Guidelines (UWIG) shall be implemented by the Permittee in their actions relative to the Project. The intent is to control the potential adverse effects of development on adjacent existing and future MSHCP conservation areas.

All proposed projects that are located adjacent or have on-site connection to either existing conservation or land described for conservation are required to address how they plan to implement all of the UWIG guidelines:

1. Measures should be incorporated to control the quantity and quality of runoff from the site entering the MSHCP Conservation Area, either directly or indirectly. Best management practices (BMPs) should be included to ensure that siltation and erosion are minimized during construction, and also incorporated into the final design of future development projects in order to ensure that future water quality is not degraded. In particular, measures shall be put in place to avoid discharge of untreated surface runoff from developed and paved areas into existing natural drainage courses and/or MSHCP Conservation Areas. Any water quality or other drainage discharges should be reviewed by RCA prior to conveyance into the MSHCP Conservation Area.

Avoidance and minimization measures will be incorporated into Project construction to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels). Refer to Chapter 2.6 for a complete list of the Project's specific avoidance and minimization measures.

2. Land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bio-products, such as manure; that are potentially toxic; or that may adversely affect wildlife species, habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP Conservation Area. The greatest risk is from landscaping fertilization overspray and runoff.

The Project does not propose any land use activities that will generate the discharge of hazardous or toxic chemicals into the MSHCP Conservation Area.

3. The siting and design of fencing cannot impede wildlife movement. Design features may include, but not be limited to, jump-outs, pass-through gates and/or one-way gates. Any description of fencing should include a commitment to routine maintenance.

No fencing within the channel is anticipated, which is the main corridor for wildlife movement. Fencing is proposed along the banks of the channel to prevent human intrusion into the channel; however, due to the extensive surrounding development, no wildlife movement along Skyview Road is anticipated. No impediment of wildlife movement as a result of the proposed pedestrian bridge is anticipated.

4. Proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate, in individual project designs to minimize unauthorized public access, domestic animal

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predation, illegal trespass, or dumping into the MSHCP Conservation Areas. Such barriers may include native landscaping, rocks/boulders, fencing, walls, signage, and/or other appropriate mechanisms.

As a component of the Project, fencing or other deterrents will be provided to ensure no potential encroachment into the creek occurs and signage will be placed at both ends of the bridge informing the public that access to the channel is restricted.

5. **Night lighting shall be directed away from the MSHCP Conservation Area to protect species within the MSHCP Conservation Area from direct night lighting. Shielding shall be incorporated in project designs to ensure ambient lighting in the MSHCP Conservation Area is not increased.**

The pedestrian bridge does not anticipate introducing new overhead lighting and any lighting impacts will be minimized through the use of low-profile LED lights with a color temperature of 2200K or lower within the bridge railings to help illuminate the path for pedestrians while avoiding creating a new source of light within French Valley Creek. The placement of the LED lights within the bridge railings will enhance pedestrian safety without light intrusion onto the biologically sensitive channel bed.

6. **Proposed noise-generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards.**

The Project does not propose any land use activities that will generate noise following the construction of the pedestrian bridge crossing.

7. **Invasive species (refer to MSHCP Table 6-2) should not be used in development or restoration plan activities.**

No invasive species will be used during the development of this Project or its associated restoration activities.

8. **Manufactured slopes are not permitted to extend within existing or planned Conservation Areas.**

Any manufactured slopes proposed as part of this Project will not extend beyond Project boundaries.

9. **Weed abatement and fuel modification zones may not encroach into existing or planned Conservation Areas or avoidance areas.**

No weed abatement or fuel modification zones are anticipated as a result of the proposed project.

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10 BEST MANAGEMENT PRACTICES (VOLUME I, APPENDIX C)

The standard BMPs described in Volume 1, Appendix C of the MSHCP must be implemented throughout the Project in order to maintain consistency with the MSHCP. These measures have been included with the avoidance and minimization measures outlined specifically for the Project (refer to Chapter 2.6).

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12 APPENDICES

Appendix A – LBV and SWFL Survey Memorandums



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 | Wind | Clouds | Precipitation | |
| | | | | (°F) | (mph) | (% cover) | | |
| 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

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Grinnell, J., and A.H. Miller

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- 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.



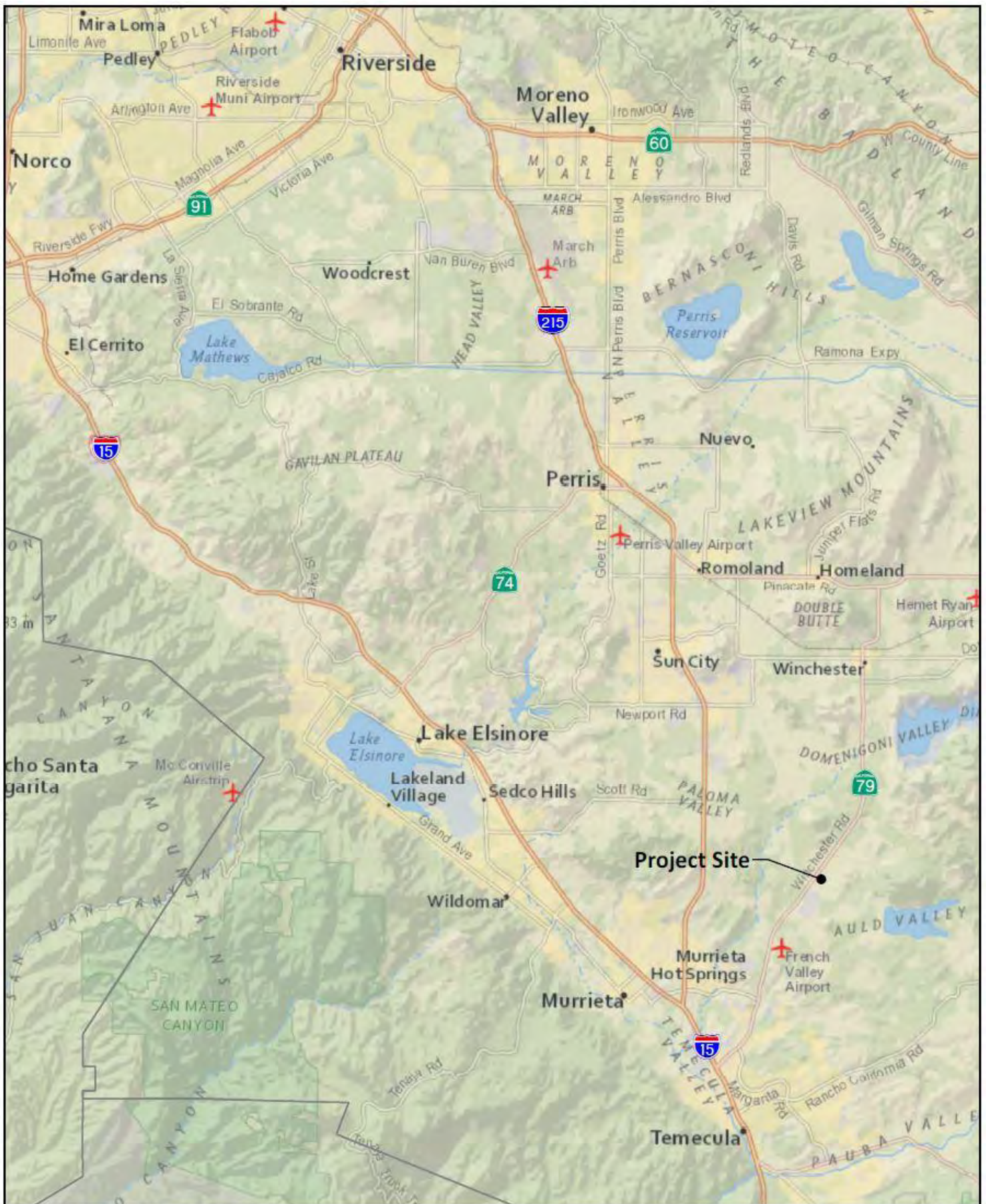
Erik LaCoste
Senior Biologist
Busby Biological Services, Inc.



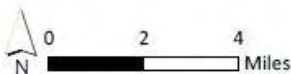
Charles Vettes
Senior Biologist
Busby Biological Services, Inc.

ATTACHMENT 1

FIGURES




Source: National Geographic, Esri

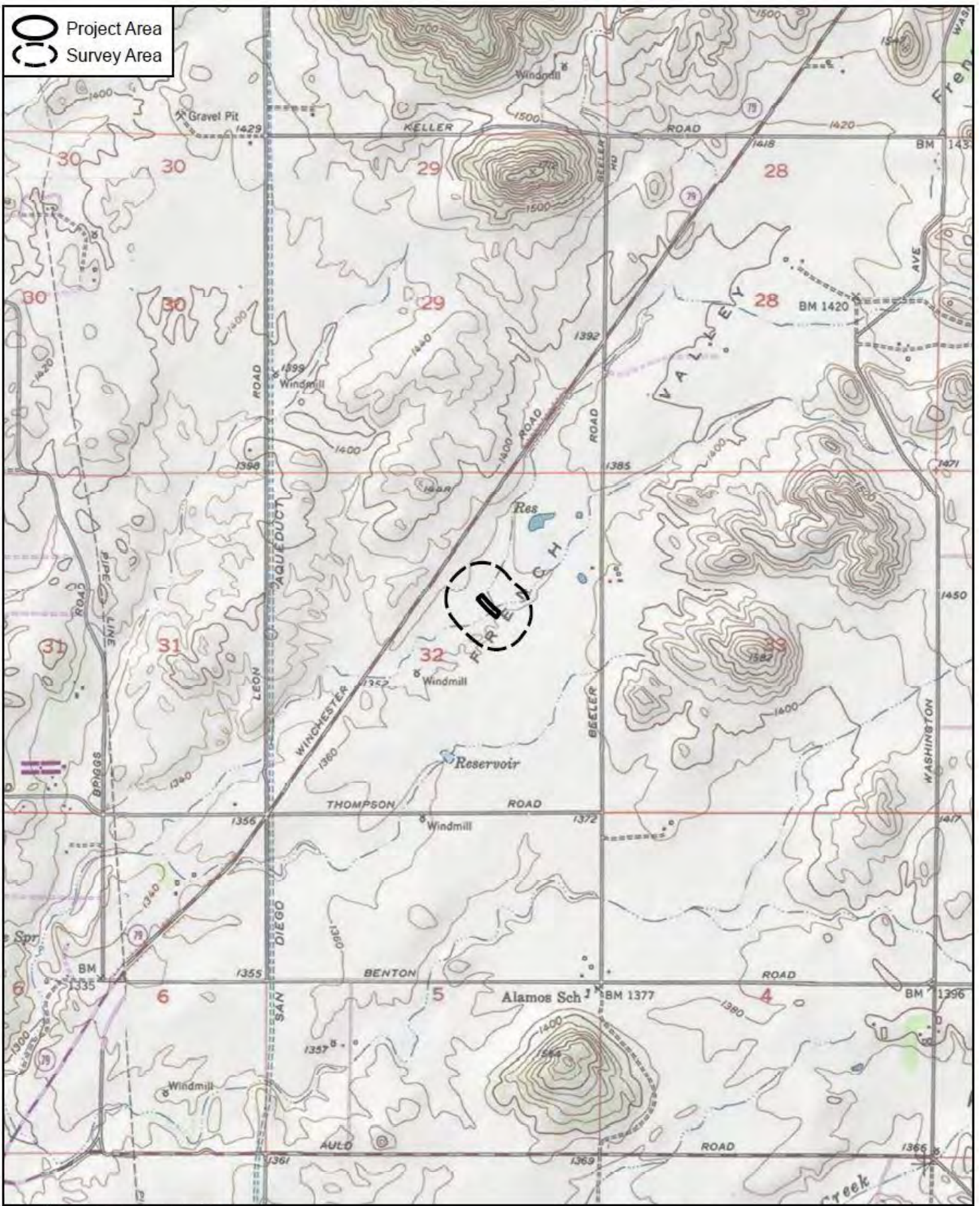


Regional Location

SKYVIEW PEDESTRIAN BRIDGE PROJECT

Figure 1


 Project Area
 Survey Area



Source: USGS 7.5' Quadrangles (Bachelor Mtn)

Project Vicinity - USGS Topo

SKYVIEW PEDESTRIAN BRIDGE PROJECT

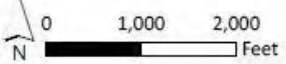












Figure 2

- | | | | |
|---|-------------------------------------|--|---|
|  | Project Area |  | Least Bell's Vireo (<i>Vireo bellii pusillus</i>) |
|  | Survey Area |  | Willow Flycatcher (<i>Empidonax traillii</i>) |
|  | Photo Location |  | Cooper's Hawk (<i>Accipiter cooperii</i>) |
|  | Least Bell's Vireo Suitable Habitat |  | Yellow-breasted Chat (<i>Icteria virens</i>) |
| | |  | Yellow Warbler (<i>Setophaga petechia</i>) |
| | |  | Brown-headed Cowbird (<i>Molothrus ater</i>) |



Source: Maxar 2018, Esri

Least Bell's Vireo Survey Results

SKYVIEW PEDESTRIAN BRIDGE PROJECT



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

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



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 neotropical 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 D. Busby |
| | | End | 1005 | 70 | 3-5 | 30 | 0 | |
| 2 | 6/1/20 | Start | 0745 | 71 | 0-1 | 100 | 0 | E. LaCoste D. Busby |
| | | End | 1000 | 80 | 1-2 | 100 | 0 | |
| 3 | 6/11/20 | Start | 0700 | 60 | 1-2 | 0 | 0 | E. LaCoste C. Vettes |
| | | End | 1000 | 84 | 2-3 | 0 | 0 | |
| 4 | 7/2/20 | Start | 0730 | 60 | 1-2 | 100 | 0 | C. Vettes D. Busby |
| | | End | 0930 | 63 | 1-2 | 100 | 0 | |
| 5 | 7/13/20 | Start | 0730 | 68 | 0-1 | 0 | 0 | E. LaCoste C. Vettes |
| | | End | 1000 | 81 | 1-3 | 0 | 0 | |

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.

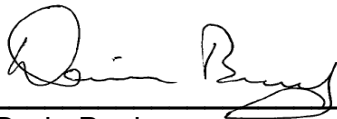
A total of 57 wildlife species were detected during the focused southwestern willow flycatcher surveys (Attachment 2). Of these 57 species, four sensitive species (in addition to willow flycatcher) were detected during these surveys, including least Bell's vireo (*Vireo bellii pusillus*), a federally 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.



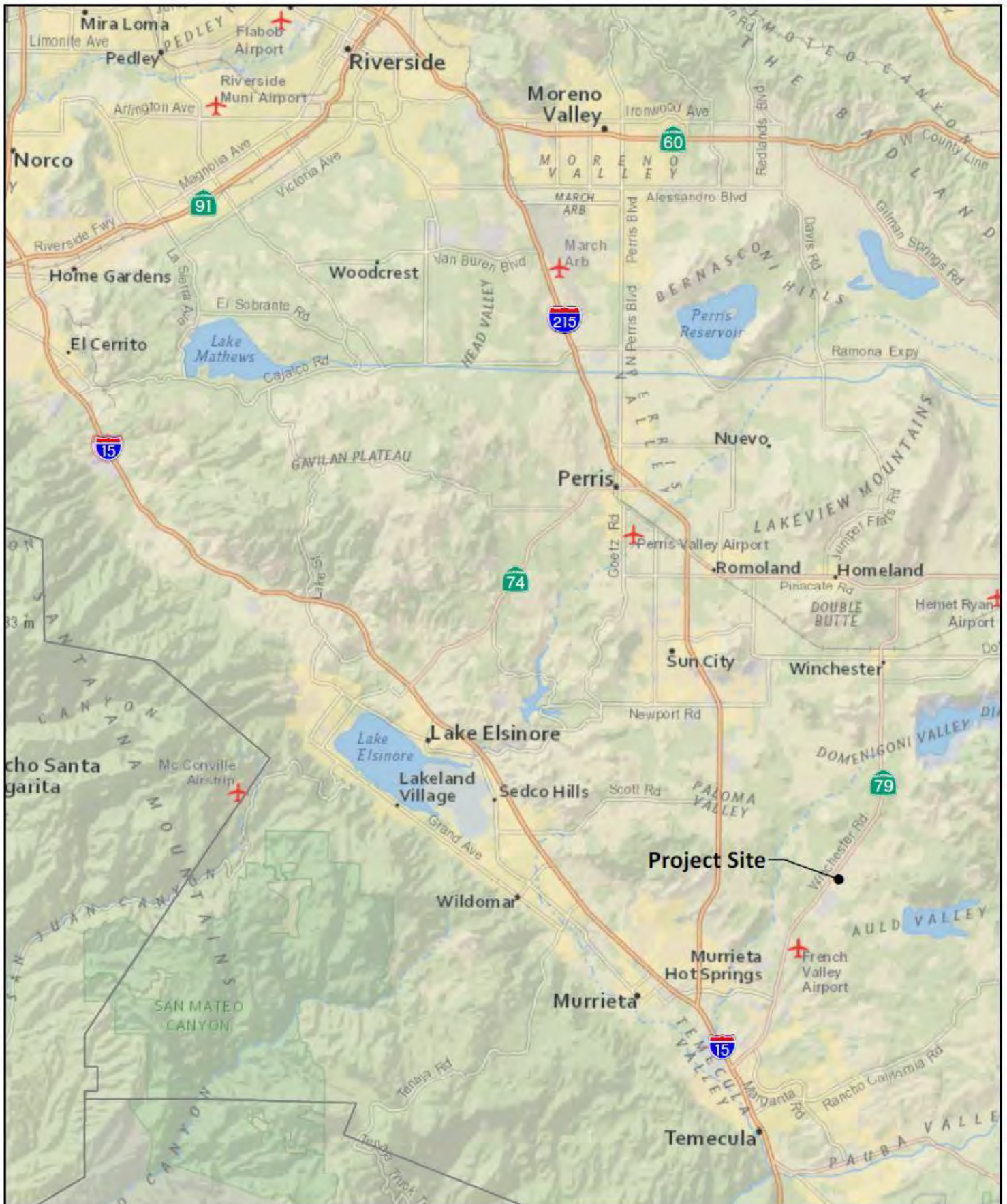
Erik LaCoste
Senior Biologist
Busby Biological Services, Inc.
ESA Permit Number TE-027736-6



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

ATTACHMENT 1

FIGURES



Source: National Geographic, Esri

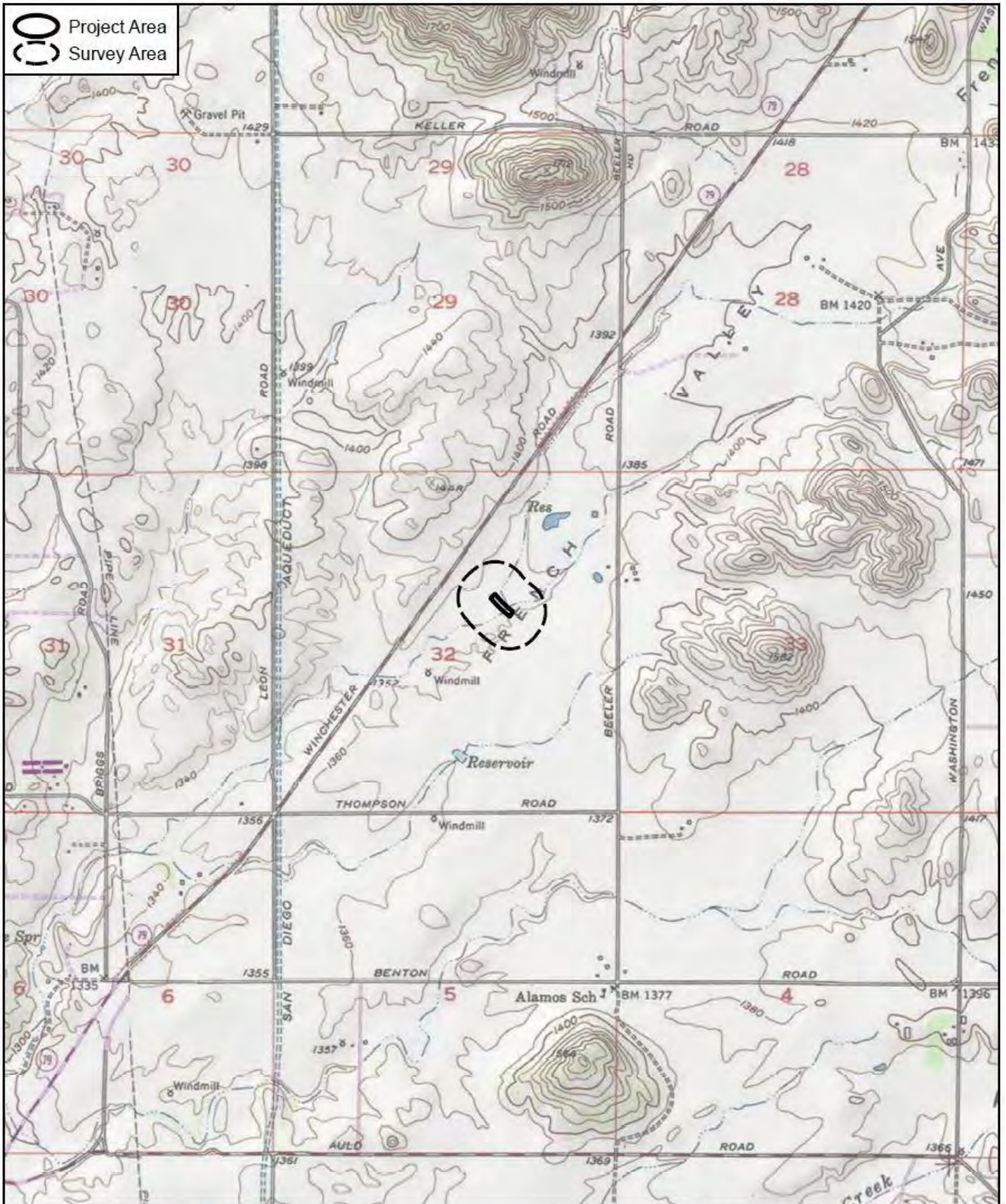
Regional Location

SKYVIEW PEDESTRIAN BRIDGE PROJECT



Figure 1

Project Area
 Survey Area



Source: USGS 7.5' Quadrangles (Bachelor Mtn)

Project Vicinity - USGS Topo

SKYVIEW PEDESTRIAN BRIDGE PROJECT



Figure 2



Source: Maxar 2018, Esri

Southwestern Willow Flycatcher Survey Results

SKYVIEW PEDESTRIAN BRIDGE PROJECT

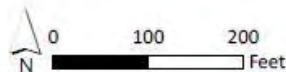


Figure 3

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

| | | | |
|-----------------------|----------------------|-----------------------------------|-------------------------------|
| | Corvidae | <i>Aphelocoma californica</i> | California Scrub-Jay |
| | | <i>Corvus brachyrhynchos</i> | American Crow |
| | | <i>Corvus corax</i> | Common Raven |
| | Fringillidae | <i>Haemorhous mexicanus</i> | House Finch |
| | | <i>Spinus psaltria</i> | Lesser Goldfinch |
| | | <i>Spinus tristis</i> | American Goldfinch |
| | Hirundinidae | <i>Hirundo rustica</i> | Barn Swallow |
| | | <i>Petrochelidon pyrrhonota</i> | Cliff Swallow |
| | | <i>Stelgidopteryx serripennis</i> | Northern Rough-winged Swallow |
| | Icteria | <i>Icteria virens*</i> | Yellow-breasted Chat |
| | Icteridae | <i>Agelaius phoeniceus</i> | Red-winged Blackbird |
| | | <i>Icterus cucullatus</i> | Hooded Oriole |
| | | <i>Molothrus ater</i> | Brown-headed Cowbird |
| | Mimidae | <i>Mimus polyglottos</i> | Northern Mockingbird |
| | Parulidae | <i>Cardellina pusilla</i> | Wilson's Warbler |
| | | <i>Geothlypis trichas</i> | Common Yellowthroat |
| | | <i>Leiothlypis celata</i> | Orange-crowned Warbler |
| | | <i>Setophaga petechia*</i> | Yellow Warbler |
| | Passerellidae | <i>Melospiza melodia</i> | Song Sparrow |
| | | <i>Pipilo maculatus</i> | Spotted Towhee |
| | Passeridae | <i>Passer domesticus</i> | House Sparrow |
| | Sturnidae | <i>Sturnus vulgaris</i> | European Starling |
| | Troglodytidae | <i>Thryomanes bewickii</i> | Bewick's Wren |
| | | <i>Troglodytes aedon</i> | House Wren |
| | Tyrannidae | <i>Empidonax difficilis</i> | Pacific-slope Flycatcher |
| | | <i>Empidonax traillii*</i> | Willow Flycatcher |
| | | <i>Empidonax wrightii</i> | Gray Flycatcher |
| | | <i>Sayornis nigricans</i> | Black Phoebe |
| | | <i>Sayornis saya</i> | Say's Phoebe |
| | | <i>Tyrannus vociferans</i> | Cassin's Kingbird |
| | Vireonidae | <i>Vireo gilvus</i> | Warbling Vireo |
| | | <i>Vireo bellii pusillus*</i> | Least Bell's Vireo |
| Pelecaniformes | | | |
| | Ardeidae | <i>Butorides virescens</i> | Green Heron |
| Piciformes | | | |
| | Picidae | <i>Dryobates nuttallii</i> | Nuttall's Woodpecker |
| MAMMALS | | | |
| Lagomorpha | | | |
| | Leporidae | <i>Sylvilagus audubonii</i> | 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: 480105.4 N: 371870.8 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 | Estimate d 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, cowsbirds, <i>Doreahada</i> spp.). If <i>Doreahada</i> 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: <u>5/12/20</u> Start: <u>0735</u> Stop: <u>1005</u> Total hrs: <u>3</u> | 0 | 0 | 0 | 0 | N/A | | | | |
| Survey # 2 Observer(s) Erik LaCoste Darin Busby | Date: <u>6/1/20</u> Start: <u>0745</u> Stop: <u>1000</u> Total hrs: <u>2:25</u> | 2 | 0 | 0 | 0 | 2 individuals detected. No nesting behavior. Both responded to call play- back. | 1 | M | 490070.7 | 3718600.6 |
| Survey # 3 Observer(s) Erik LaCoste Charles Vettes | Date: <u>6/11/20</u> Start: <u>0700</u> Stop: <u>1000</u> Total hrs: <u>3</u> | 0 | 0 | 0 | 0 | N/A | | | | |
| Survey # 4 Observer(s) Charles Vettes Darin Busby | Date: <u>7/2/20</u> Start: <u>0730</u> Stop: <u>0930</u> Total hrs: <u>2</u> | 0 | 0 | 0 | 0 | N/A | | | | |
| Survey # 5 Observer(s) Erik LaCoste Charles Vettes | Date: <u>7/13/20</u> Start: <u>0730</u> Stop: <u>1000</u> Total hrs: <u>2.5</u> | 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 <input type="checkbox"/> No <input checked="" type="checkbox"/> 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.

32 A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher

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 lasioloopsis, 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.

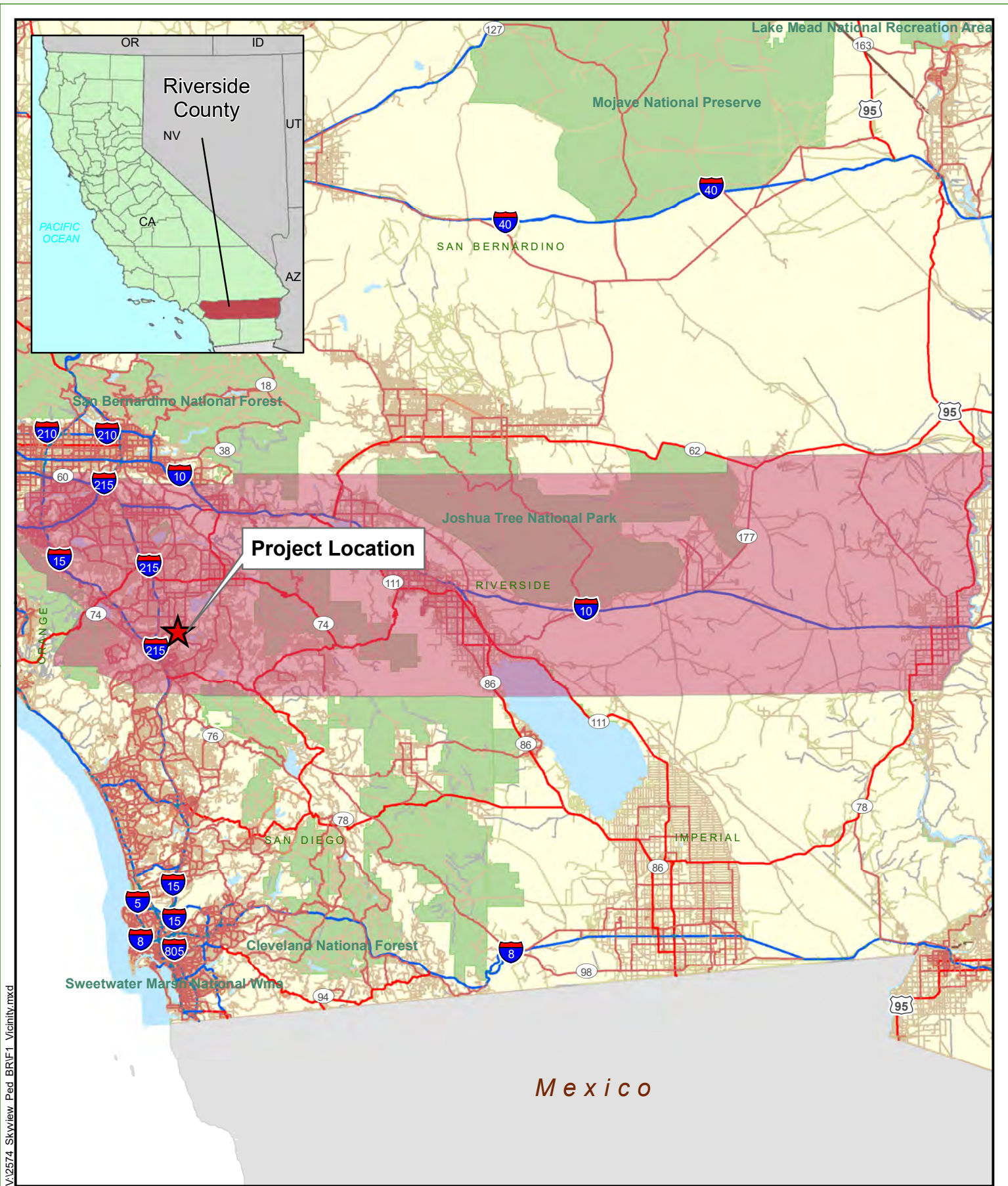
| Territory Number | All Dates Detected | UTM E | UTM N | Pair Confirmed? Y or N | Nest Found? Y or N | Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior) |
|------------------|--------------------|-------|-------|------------------------|--------------------|---|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

Attach additional sheets if necessary

MSHCP Consistency Analysis

Appendix B – Project Mapping

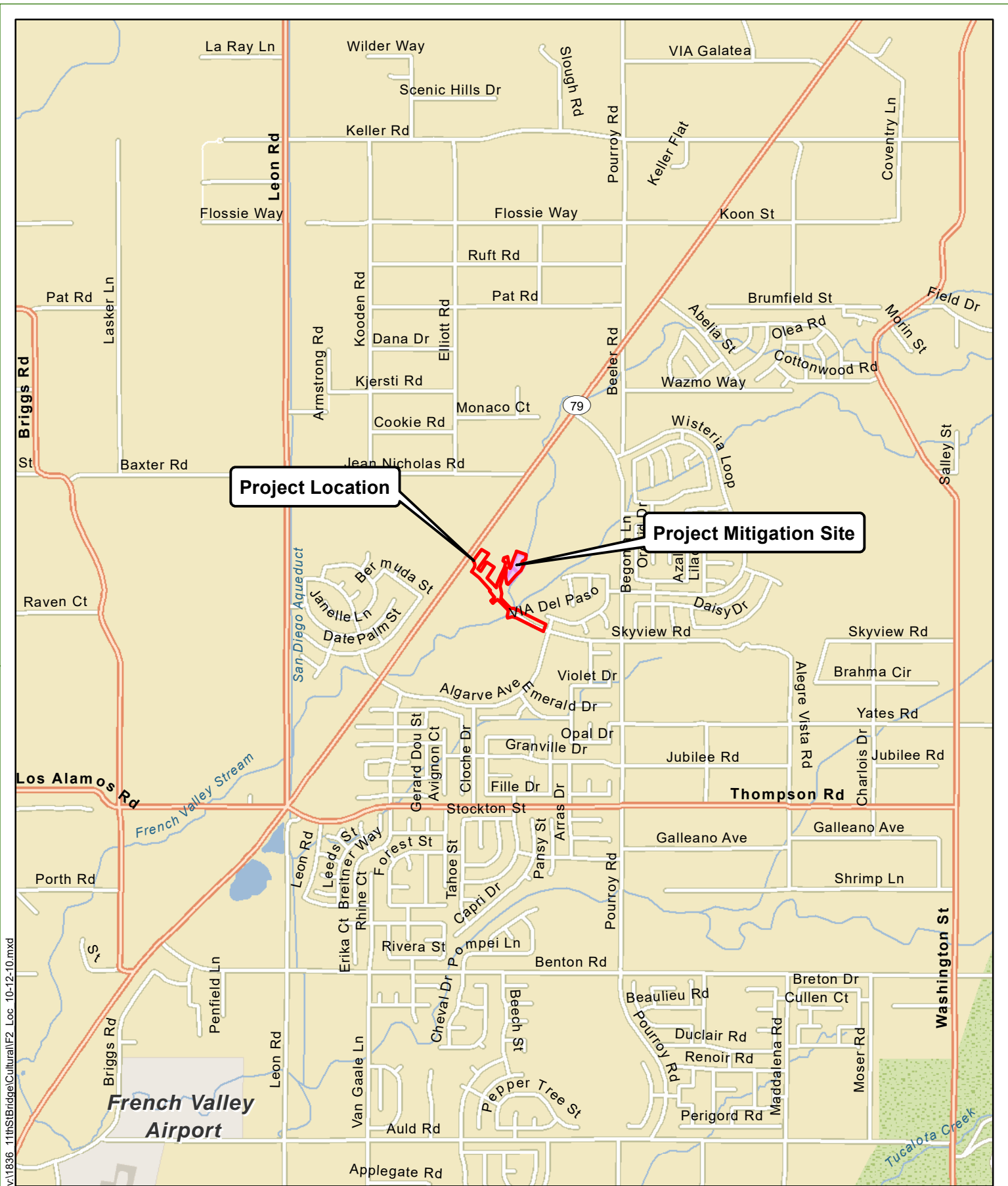
- Figure 1. Project Vicinity
- Figure 2. Project Location
- Figure 3. Project Features
- Figure 4. Vegetation Communities
- Figure 5. Project Impacts
- Figure 6. Geotechnical Survey Impacts
- Figure 7. Proposed Mitigation Site
- Figure 8. MSHCP Criteria Cell Features
- Figure 9. Criteria Area Species: Habitat Evaluation
- Figure 10. MSHCP Trail Coverage



V:\2574_Skyview_Ped_BR\F1_Vicinity.mxd

Source: ESRI 2008; Dokken Engineering 11/17/2021; Created By: vchevreuil

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



v:\1836_11thSt\Bridges\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 5/13/2022; Created By: zach

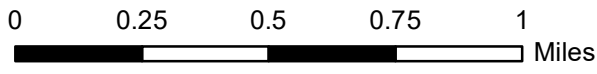


FIGURE 2
Project Location
 Skyview Road Pedestrian Bridge Project
 Winchester, Riverside County, California



V:\2574_Skyview Ped_BR\Biol\WF3_Project Features_2022-10-07.mxd

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








1 inch = 150 feet




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



| | |
|---|-------------------------------------|
|  | Project Area (5.298 acres) |
| Vegetation Community | |
|  | Developed (4.470 acres) |
|  | Emergent Wetland (0.336 acres) |
|  | Willow Scrub Riparian (0.328 acres) |
|  | Alkali Salt Marsh (0.167 acres) |

V:\2574_Skyview_Ped_BR\Biology\F4_Vegetation Communities_2022-10-07.mxd

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



| | |
|--|--|
| Project Area (5.298 acres) | Impacts to Willow Scrub Riparian |
| Bellacap Conservation Easement | Permanent (0.029 acres) |
| Ryland Conservation Easement | Shade (0.077 acres) |
| Project Features | Temporary (0.192 acres) |
| Bridge and Sidewalk | Temporary; Conservation Easement (0.094 acres) |
| Riprap (replacing existing facility) | Impacts to Alkali Salt |
| Stormwater Drain (replacing existing facility) | Permanent (0.009 acres) |
| ESA Fencing | Shade (0.091 acres) |
| Impacts to Emergent Wetland | Temporary (0.032 acres) |
| Permanent (0.007 acres) | Temporary; Conservation Easement (0.035 acres) |
| Shade (0.152 acres) | Impacts to Development |
| Temporary (0.127 acres) | Permanent (0.225 acres) |
| Temporary; Conservation Easement (0.050 acres) | Temporary (4.250 acres) |

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

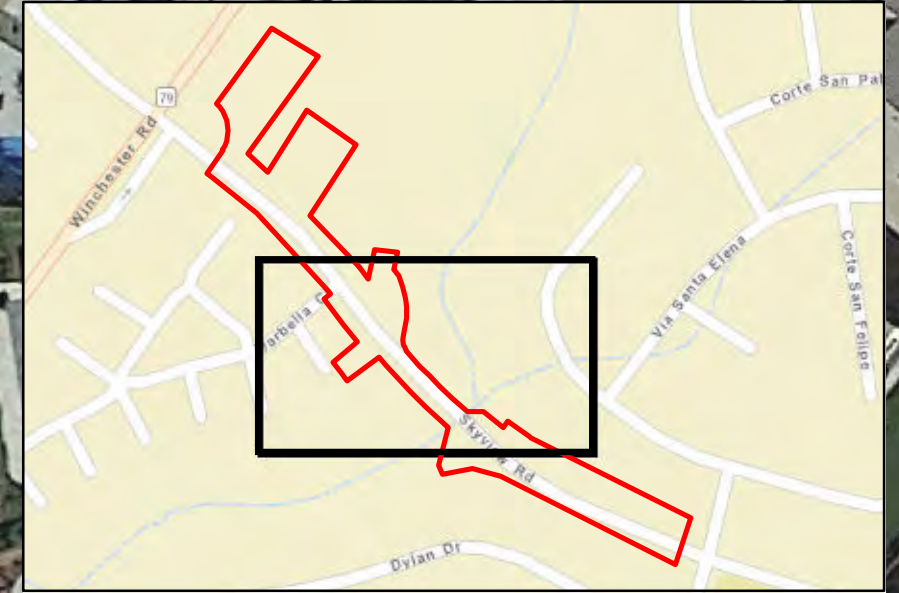


1 inch = 100 feet



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

-  Project Area (5.298 acres)
-  Proposed Geotechnical Survey Access Route
-  Proposed Bridge Piles
- Temporary Impacts due to Geotechnical Borings**
-  Alkali Salt Marsh (0.076 acres)
-  Emergent Wetland (0.063 acres)
-  Willow Scrub Riparian (0.055 acres)

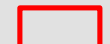
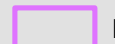




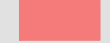


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Source: ESRI Maps Online; Dokken Engineering 10/18/2022; Created By: cfavro



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

| | |
|--|--|
|  Project Area (5.298 acres) |  Proposed Off-Site Mitigation |
| On-Site Habitat Re-establishment | Invasive Species Removal |
|  Emergent Wetland (0.177 acres) |  Broad-leaved pepperweed |
|  Willow Scrub Riparian (0.286 acres) |  Tamarisk and tree tobacco |
|  Alkali Salt Marsh (0.067 acres) | |



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

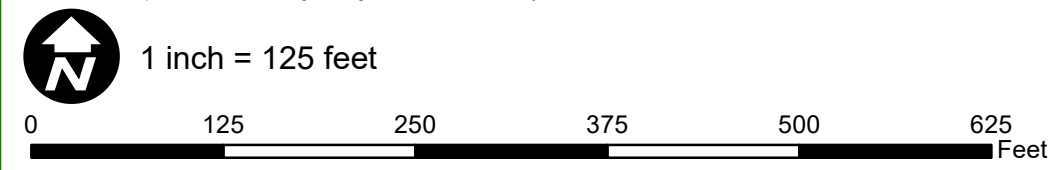









Figure 7
Proposed Mitigation Site
 Skyview Road Pedestrian Bridge Project
 Winchester, Riverside County, California

-  Criteria Cell #5477
 -  Project Area
 -  Proposed Off-Site Mitigation
 -  Parcels
- MSHCP Lands**
- MSHCP Lands**
-  MSHCP Conservation Easements (11.7 acres)
 -  MSHCP Conserved Lands (1.7 acres)
 -  Non-MSHCP Conservation Easements (6.8 acres)



V:\2574_Skyview_Ped_BR\Biology\RCA Documents\F8_MSHCP_Criteria Cell Features_2022-05-18.mxd

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

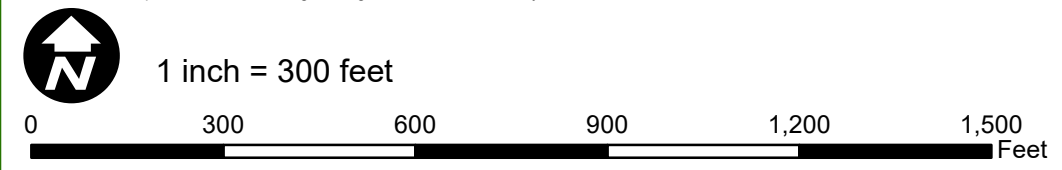


Figure 8
MSHCP Criteria Cell Features
 Skyview Road Pedestrian Bridge Project
 Winchester, Riverside County, California

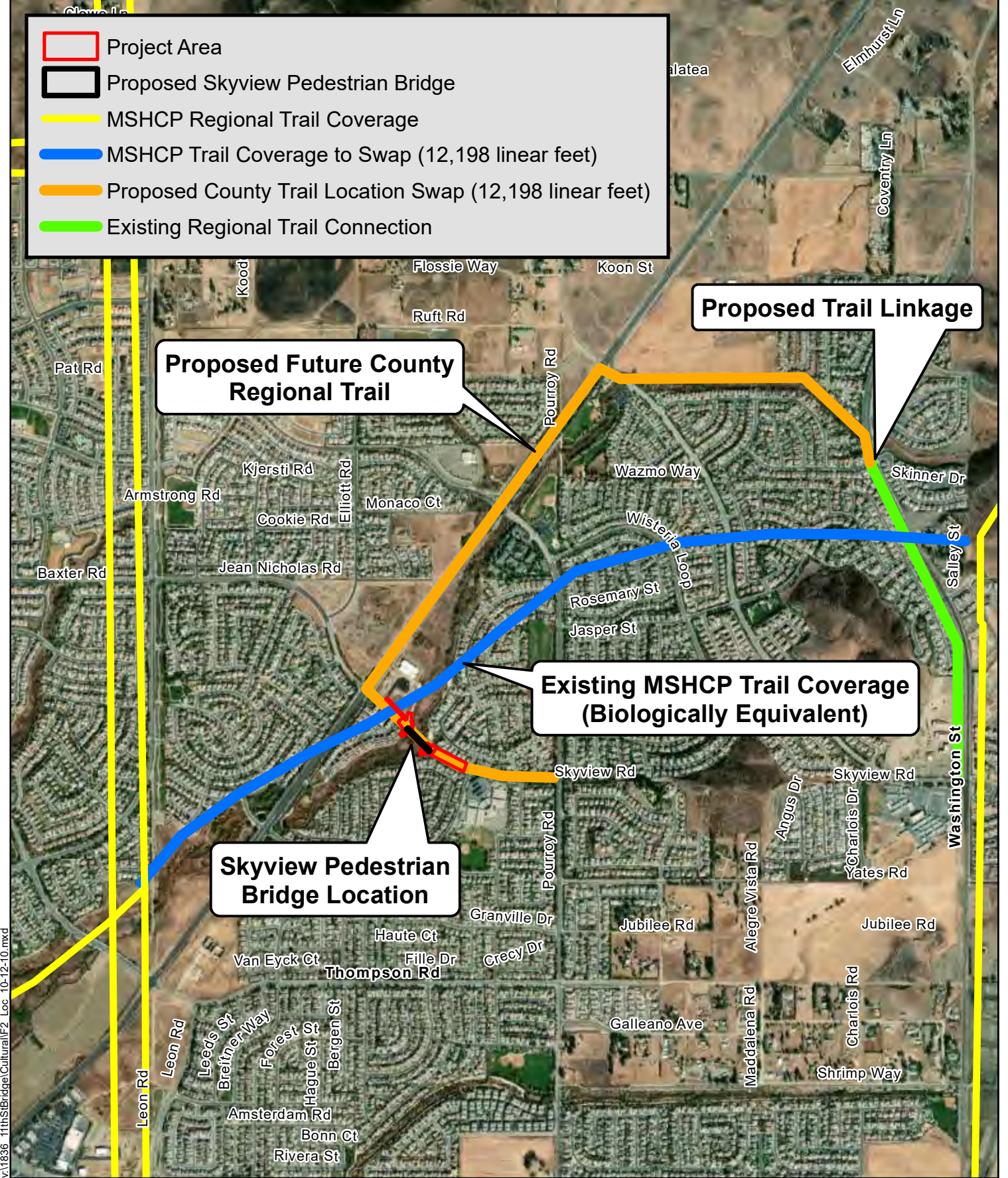


V:\2574_Skyview_Ped_BR\Biology\RCA Documents\F9_Criteria Area Species Habitat Evaluation_2022-10-18.mxd

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



Figure 9
Criteria Area Plant Species: Habitat Evaluation
 Skyview Road Pedestrian Bridge Project
 Winchester, Riverside County, California



\s1836_11ths\Bridges\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 3/15/2022; Created By: cfavro

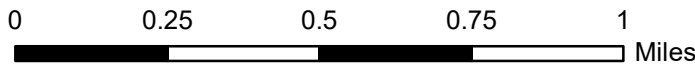
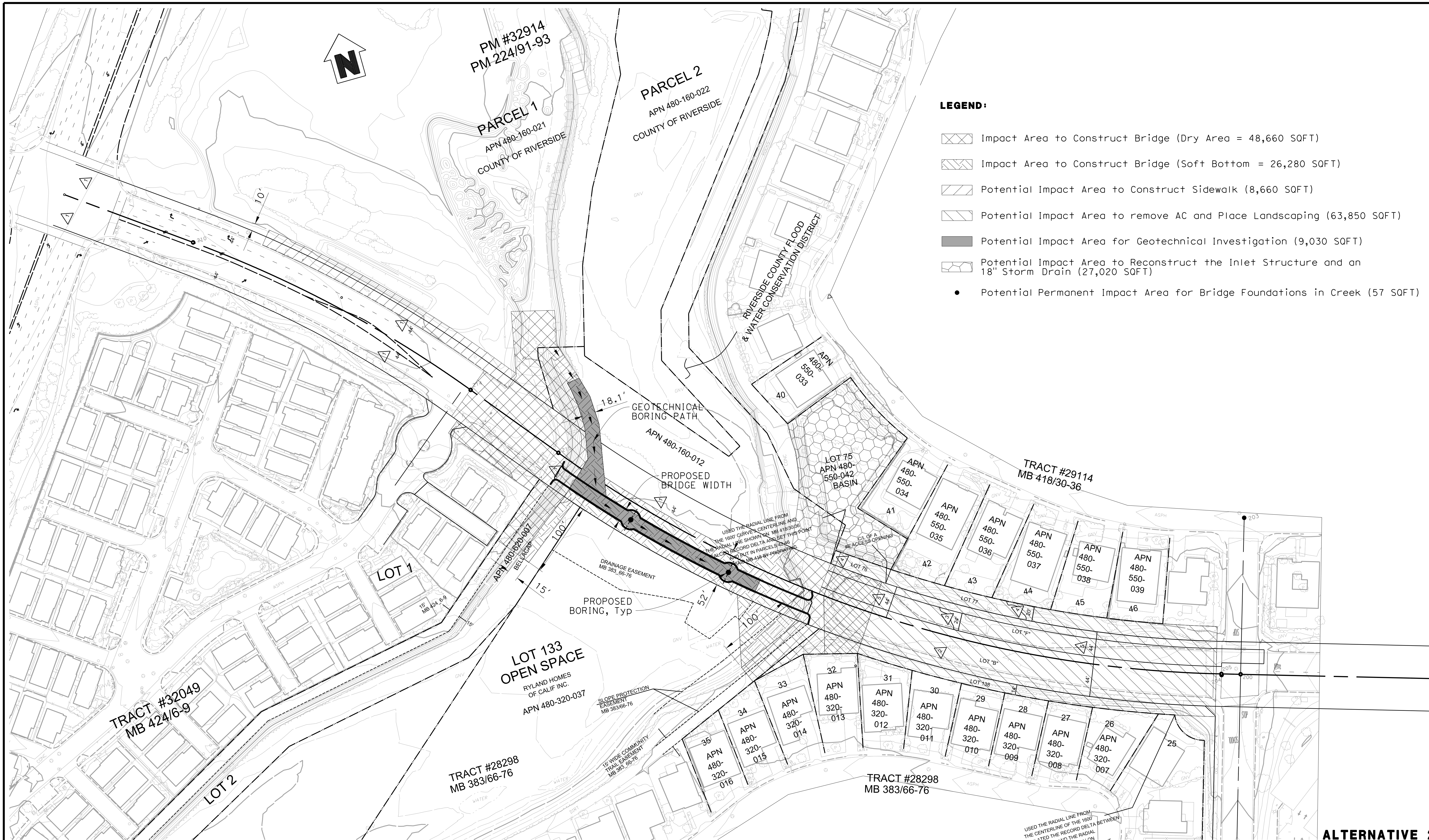


FIGURE 10
MSHCP Trail Coverage
 Skyview Drive Pedestrian Bridge Project
 Winchester, Riverside County, California

MSHCP Consistency Analysis

Appendix C – Impacts by Alternatives Figures



- LEGEND:**
- Impact Area to Construct Bridge (Dry Area = 48,660 SQFT)
 - Impact Area to Construct Bridge (Soft Bottom = 26,280 SQFT)
 - Potential Impact Area to Construct Sidewalk (8,660 SQFT)
 - Potential Impact Area to remove AC and Place Landscaping (63,850 SQFT)
 - Potential Impact Area for Geotechnical Investigation (9,030 SQFT)
 - Potential Impact Area to Reconstruct the Inlet Structure and an 18" Storm Drain (27,020 SQFT)
 - Potential Permanent Impact Area for Bridge Foundations in Creek (57 SQFT)

ALTERNATIVE 2

| REVISIONS | | | | |
|-----------|------|-------------|----|-------|
| MARK | DATE | DESCRIPTION | BY | APP'D |
| | | | | |
| | | | | |
| | | | | |

| | | | |
|----------------|-----------|-------------|--|
| DESIGN BY: | J. Nguyen | CHECKED BY: | |
| DETAILS BY: | N. Li | CHECKED BY: | |
| QUANTITIES BY: | J. Nguyen | CHECKED BY: | |

| | |
|---------------------------------|--|
| LOAD & RESISTANCE FACTOR DESIGN | LIVE LOADING: PEDESTRIAN LOADS OR HS-20-44 |
| LAYOUT BY: O. Nguyen | CHECKED BY: |
| SPECIFICATIONS | PLANS AND SPECS COMPARED BY: |
| BRIDGE NO. | |

**COUNTY OF RIVERSIDE
TRANSPORTATION DEPARTMENT**

Approved to conformance with County Standards and Practices.

COUNTY OVERSIGHT ENGINEER DATE

CNS ENGINEERS, INC.

REGISTERED PROFESSIONAL ENGINEER
DUYET TRONG NGUYEN
No. C 71743
Exp. 12/31/21
CIVIL

PROJECT ENGINEER 08-27-21
DATE

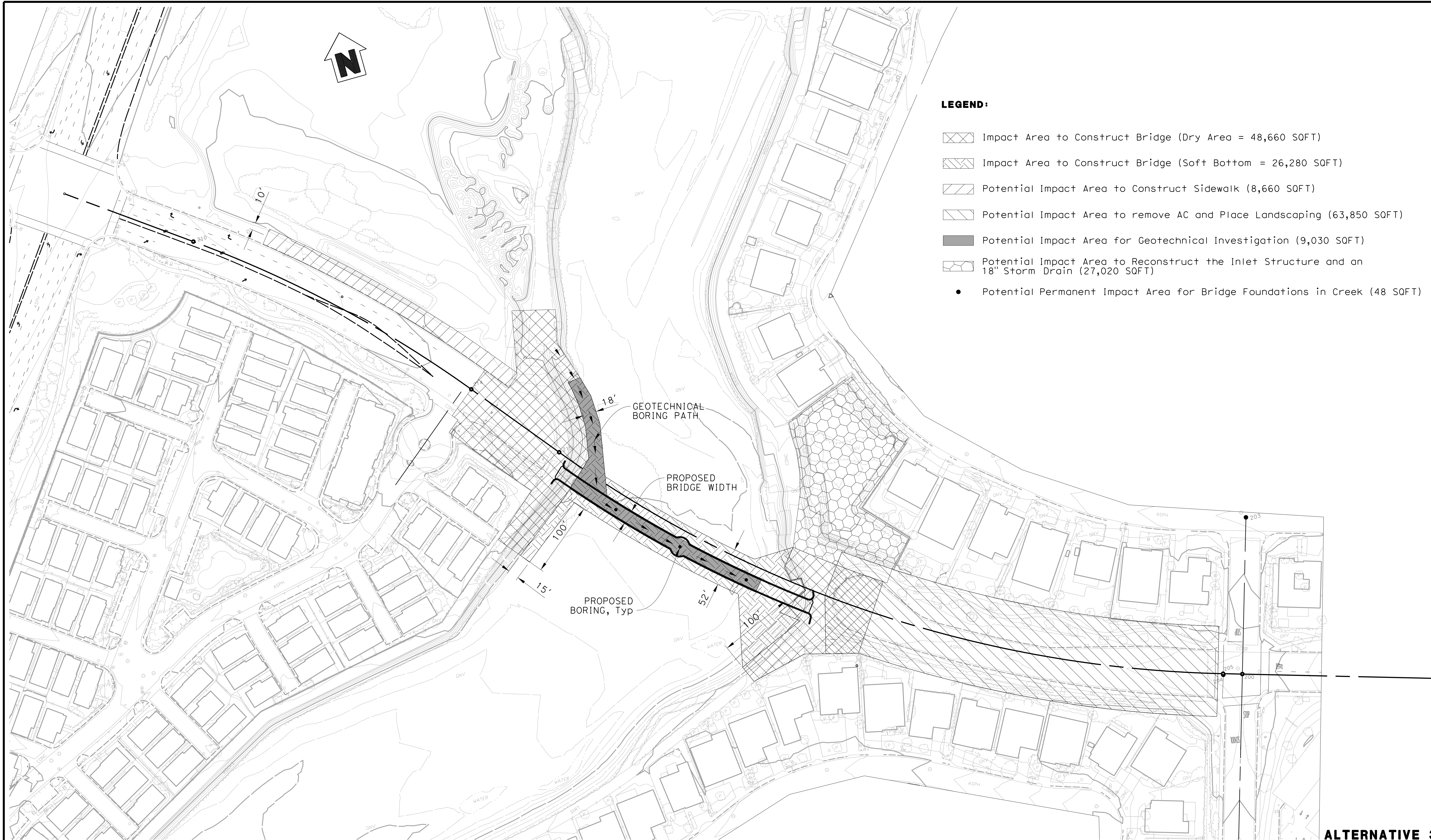
11870 PIERCE ST., STE. 265
RIVERSIDE, CA 92505 PH: (951) 687-1005

**SKYVIEW ROAD PEDESTRIAN BRIDGE
OVER FRENCH VALLEY CHANNEL**

**3-SPAN OPTION
IMPACT AREA**

SCALE: AS SHOWN

| | |
|-------------------|--------------|
| SHEET NO. | |
| | |
| SHEET | OF |
| PROJECT SHEET NO. | TOTAL SHEETS |
| 1 | 5 |



LEGEND:

- Impact Area to Construct Bridge (Dry Area = 48,660 SQFT)
- Impact Area to Construct Bridge (Soft Bottom = 26,280 SQFT)
- Potential Impact Area to Construct Sidewalk (8,660 SQFT)
- Potential Impact Area to remove AC and Place Landscaping (63,850 SQFT)
- Potential Impact Area for Geotechnical Investigation (9,030 SQFT)
- Potential Impact Area to Reconstruct the Inlet Structure and an 18" Storm Drain (27,020 SQFT)
- Potential Permanent Impact Area for Bridge Foundations in Creek (48 SQFT)

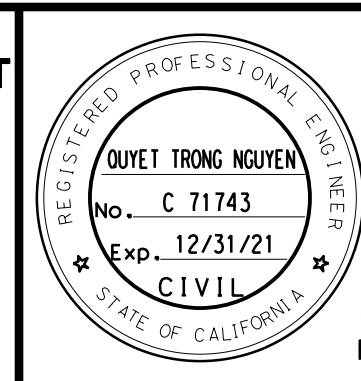
ALTERNATIVE 3

| REVISIONS | | | | |
|-----------|------|-------------|----|-------|
| MARK | DATE | DESCRIPTION | BY | APP'D |
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| | | | |
|----------------|-----------|-------------|--|
| DESIGN BY: | J. Nguyen | CHECKED BY: | |
| DETAILS BY: | N. Li | CHECKED BY: | |
| QUANTITIES BY: | J. Nguyen | CHECKED BY: | |

| | |
|--|--|
| LOAD & RESISTANCE FACTOR DESIGN | LIVE LOADING: PEDESTRIAN LOADS OR HS-20-44 |
| LAYOUT BY: O. Nguyen | CHECKED BY: |
| SPECIFICATIONS BY: | PLANS AND SPECS COMPARED BY: |
| BRIDGE NO. | |
| ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | 0 1 2 3 |

COUNTY OF RIVERSIDE TRANSPORTATION DEPARTMENT
 Approved to conformance with County Standards and Practices.
 COUNTY OVERSIGHT ENGINEER DATE



CNS ENGINEERS, INC.
 PROJECT ENGINEER DATE: 08-27-21
 11870 PIERCE ST., STE. 265
 RIVERSIDE, CA 92505 PH: (951) 687-1005

SKYVIEW ROAD PEDESTRIAN BRIDGE OVER FRENCH VALLEY CHANNEL
4-SPAN OPTION
IMPACT AREA
 SCALE: AS SHOWN

| | | | |
|-------------------|---|--------------|---|
| SHEET NO. | | OF | |
| PROJECT SHEET NO. | 1 | TOTAL SHEETS | 5 |

PLOT DRIVER => \$PLTDVRS \$PENTBLS
PEN TABLE =>

USERNAME => Sharp DGN FILE => Impact Area - 4-span Option.dgn

WO 0000

COUNTY FILE No.

LAST REVISION: DATE PLOTTED => 10/11/2021
04-21-15 TIME PLOTTED => 3:47:29 PM

MSHCP Consistency Analysis

Appendix D - Wetland and Waterway Delineation Report

October 2020

RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT

Skyview Road Pedestrian Bridge

Wetland and Waterway Delineation Report

PROJECT NUMBER:
164717

PROJECT CONTACT:
Kim Quinn
EMAIL:
Kim.quinn@powereng.com
PHONE:
714-507-2730



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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° 36' 25.72" N, -117° 06' 27.60" W
- Southeast side: 33° 36' 23.00" N, -117° 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 |
|--|----------------------|----------------------------|
| <i>Anemopsis californica</i> | Yerba mansa | OBL |
| <i>Baccharis salicifolia</i> | Mule fat | FAC |
| <i>Distichlis spicata</i> | Salt grass | FAC |
| <i>Eleocharis parishii</i> | Parish's spike rush | FACW |
| <i>Juncus arcticus</i> var. <i>mexicanus</i> | Mexican rush | FACW |
| <i>Mimulus guttatus</i> | Seep monkey flower | OBL |
| <i>Muhlenbergia rigens</i> | California deergrass | FAC |
| <i>Pluchea odorata</i> | Salt marsh fleabane | FACW |
| <i>Polygonum lapathifolium</i> | Dock-leaf smartweed | FACW |
| <i>Polypogon monspeliensis</i> | Annual beard grass | FACW |
| <i>Salix gooddingii</i> | Goodding's willow | FACW |
| <i>Salix laevigata</i> | Red willow | FACW |
| <i>Stachys rigida</i> subsp. <i>rigida</i> | Rigid hedge-nettle | FACW |
| <i>Typha domingensis</i> | 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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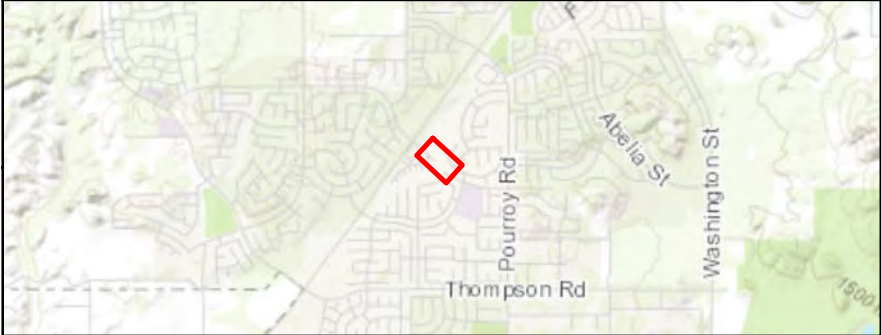
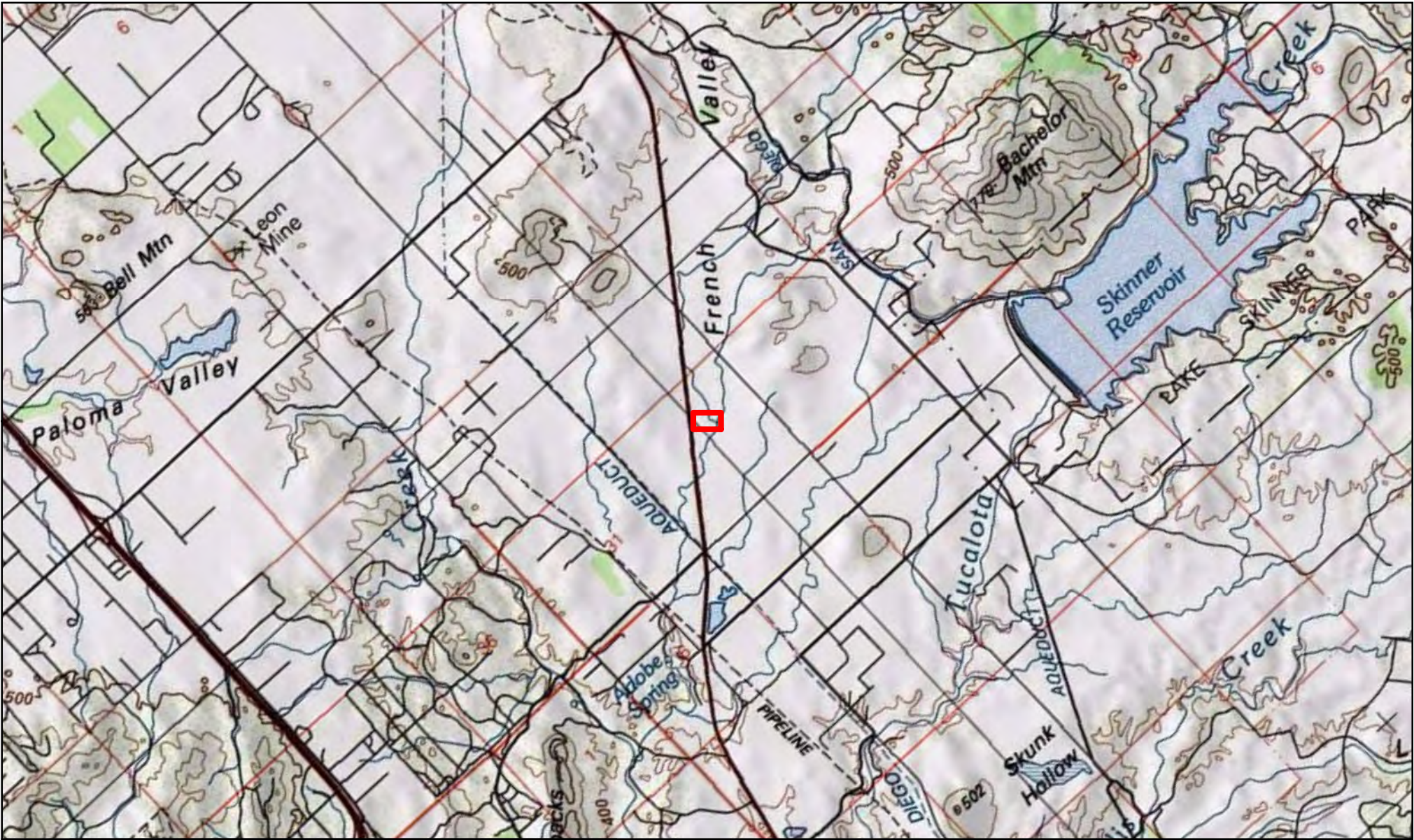
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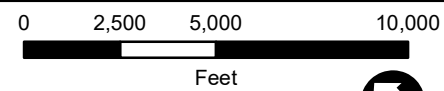
APPENDIX A PROJECT MAPS

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 Project Area

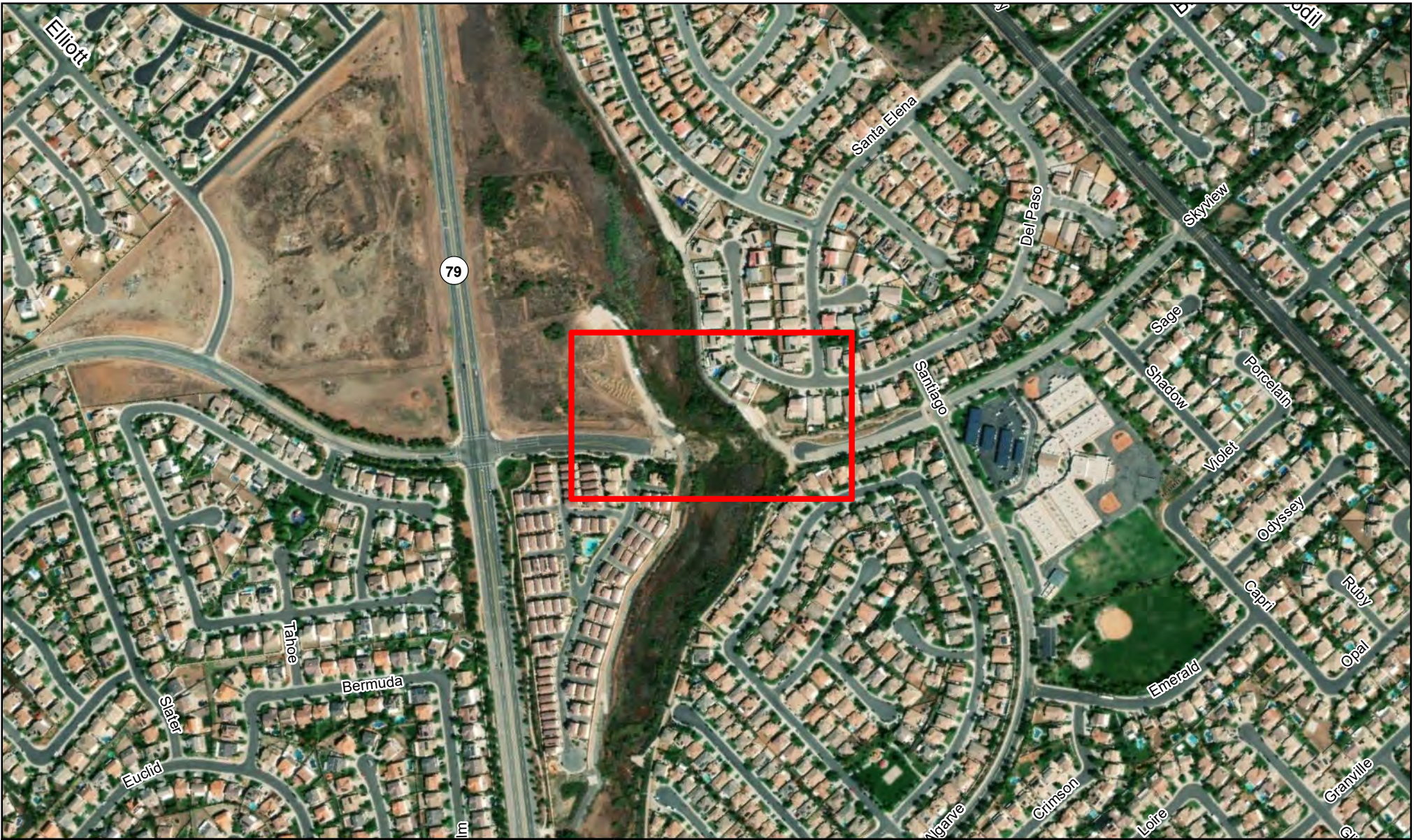
Skyview Road Pedestrian Bridge
 Wetlands and Waterways
 Topographic Vicinity



Date: 10/15/2020

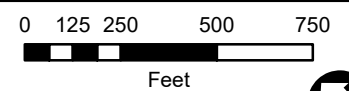


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 Project Area

Skyview Road Pedestrian Bridge
Wetlands and Waterways
Aerial Overview



Date: 10/15/2020



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



- 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

Date: 10/15/2020

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



- 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

APPENDIX B PHOTOGRAPHS

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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: SKview Road City/County: Riverside County Sampling Date: 7/16/20
 Applicant/Owner: Riverside County Transportation Dept. State: CA Sampling Point: WET1
 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: 33.6067 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 No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes 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 <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Remarks: | |

VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test worksheet: |
|--|-------------------------------|-------------------|------------------|---|
| 1. <u>None</u> | | | | Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) |
| 2. _____ | | | | Total Number of Dominant Species Across All Strata: <u>2</u> (B) |
| 3. _____ | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B) |
| 4. _____ | | | | |
| | = Total Cover | | | |
| Sapling/Shrub Stratum (Plot size: <u>15' R</u>) | | | | Prevalence Index worksheet: |
| 1. <u>Salix gooddingii</u> | <u>30</u> | <u>Y</u> | <u>FACW</u> | Total % Cover of: _____ Multiply by: _____ |
| 2. _____ | | | | OBL species _____ x 1 = _____ |
| 3. _____ | | | | FACW species _____ x 2 = _____ |
| 4. _____ | | | | FAC species _____ x 3 = _____ |
| 5. _____ | | | | FACU species _____ x 4 = _____ |
| | <u>30</u> = Total Cover | | | UPL species _____ x 5 = _____ |
| | | | | Column Totals: _____ (A) _____ (B) |
| | | | | Prevalence Index = B/A = _____ |
| Herb Stratum (Plot size: <u>5' R</u>) | | | | Hydrophytic Vegetation Indicators: |
| 1. <u>Typha domingensis</u> | <u>75</u> | <u>Y</u> | <u>OBL</u> | <input checked="" type="checkbox"/> Dominance Test is >50% |
| 2. <u>Ahemopsis californica</u> | <u>10</u> | <u>N</u> | <u>OBL</u> | <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ |
| 3. <u>Heterotheca grandiflora</u> | <u>5</u> | <u>N</u> | <u>UPL</u> | <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) |
| 4. _____ | | | | <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) |
| 5. _____ | | | | |
| 6. _____ | | | | |
| 7. _____ | | | | |
| 8. _____ | | | | |
| | <u>90</u> = Total Cover | | | |
| Woody Vine Stratum (Plot size: _____) | | | | |
| 1. <u>None</u> | | | | |
| 2. _____ | | | | |
| | = Total Cover | | | |
| % Bare Ground in Herb Stratum <u>10</u> | % Cover of Biotic Crust _____ | | | |
| Remarks: | | | | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |

SOIL

Sampling Point: WET1

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

| Depth (inches) | Matrix | | Redox Features | | | | Texture | Remarks |
|----------------|---------------|-----|----------------|---|-------------------|------------------|------------------------|---------|
| | Color (moist) | % | Color (moist) | % | Type ¹ | Loc ² | | |
| 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 | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

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

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

| | | |
|--|---|---|
| <input type="checkbox"/> Histosol (A1) | <input type="checkbox"/> Sandy Redox (S5) | <input type="checkbox"/> 1 cm Muck (A9) (LRR C) |
| <input type="checkbox"/> Histic Epipedon (A2) | <input type="checkbox"/> Stripped Matrix (S6) | <input type="checkbox"/> 2 cm Muck (A10) (LRR B) |
| <input type="checkbox"/> Black Histic (A3) | <input type="checkbox"/> Loamy Mucky Mineral (F1) | <input type="checkbox"/> Reduced Vertic (F18) |
| <input type="checkbox"/> Hydrogen Sulfide (A4) | <input type="checkbox"/> Loamy Gleyed Matrix (F2) | <input type="checkbox"/> Red Parent Material (TF2) |
| <input type="checkbox"/> Stratified Layers (A5) (LRR C) | <input type="checkbox"/> Depleted Matrix (F3) | <input type="checkbox"/> Other (Explain in Remarks) |
| <input type="checkbox"/> 1 cm Muck (A9) (LRR D) | <input checked="" type="checkbox"/> Redox Dark Surface (F6) | |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Dark Surface (F7) | |
| <input type="checkbox"/> Thick Dark Surface (A12) | <input type="checkbox"/> Redox Depressions (F8) | |
| <input type="checkbox"/> Sandy Mucky Mineral (S1) | <input type="checkbox"/> Vernal Pools (F9) | |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4) | | |

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

| Primary Indicators (minimum of one required; check all that apply) | Secondary Indicators (2 or more required) |
|--|--|
| <input type="checkbox"/> Surface Water (A1) | <input type="checkbox"/> Water Marks (B1) (Riverine) |
| <input checked="" type="checkbox"/> High Water Table (A2) | <input type="checkbox"/> Sediment Deposits (B2) (Riverine) |
| <input checked="" type="checkbox"/> Saturation (A3) | <input type="checkbox"/> Drift Deposits (B3) (Riverine) |
| <input type="checkbox"/> Water Marks (B1) (Nonriverine) | <input checked="" type="checkbox"/> Drainage Patterns (B10) |
| <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) | <input type="checkbox"/> Dry-Season Water Table (C2) |
| <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) | <input type="checkbox"/> Crayfish Burrows (C8) |
| <input type="checkbox"/> Surface Soil Cracks (B6) | <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Shallow Aquitard (D3) |
| <input type="checkbox"/> Water-Stained Leaves (B9) | <input type="checkbox"/> FAC-Neutral Test (D5) |
| <input type="checkbox"/> Salt Crust (B11) | |
| <input type="checkbox"/> Biotic Crust (B12) | |
| <input type="checkbox"/> Aquatic Invertebrates (B13) | |
| <input type="checkbox"/> Hydrogen Sulfide Odor (C1) | |
| <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) | |
| <input type="checkbox"/> Presence of Reduced Iron (C4) | |
| <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) | |
| <input type="checkbox"/> Thin Muck Surface (C7) | |
| <input type="checkbox"/> Other (Explain in Remarks) | |

Field Observations:

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

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

Saturation Present? Yes No Depth (inches): 2"

(includes capillary fringe)

Wetland Hydrology Present? Yes 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 <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u> | Is the Sampled Area within a Wetland? Yes _____ No <u>X</u> |
| Remarks: | |

VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size: _____) | Absolute % Cover | Dominant Species? | Indicator Status | |
|---|------------------|-------------------------------|------------------|---|
| 1. <u>None</u> | | | | Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B) |
| 2. _____ | | | | |
| 3. _____ | | | | |
| 4. _____ | | | | |
| _____ = Total Cover | | | | Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>1</u> x 3 = <u>3</u> FACU species _____ x 4 = _____ UPL species <u>1</u> x 5 = <u>5</u> Column Totals: <u>2</u> (A) <u>8</u> (B) Prevalence Index = B/A = <u>2.67</u> |
| Sapling/Shrub Stratum (Plot size: _____) | | | | |
| 1. <u>None</u> | | | | |
| 2. _____ | | | | |
| 3. _____ | | | | |
| _____ = Total Cover | | | | |
| Herb Stratum (Plot size: _____) | | | | |
| 1. <u>Heterotheca grandiflora</u> | <u>10</u> | <u>X</u> | <u>UPL</u> | |
| 2. <u>Xanthium strumarium</u> | <u>15</u> | <u>Y</u> | <u>FAC</u> | |
| 3. _____ | | | | |
| 4. _____ | | | | |
| 5. _____ | | | | |
| 6. _____ | | | | |
| 7. _____ | | | | |
| 8. _____ | | | | |
| <u>25</u> = Total Cover | | | | |
| Woody Vine Stratum (Plot size: _____) | | | | |
| 1. <u>None</u> | | | | |
| 2. _____ | | | | |
| _____ = Total Cover | | | | |
| % Bare Ground in Herb Stratum <u>75</u> | | % Cover of Biotic Crust _____ | | |
| 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 <u>X</u> | |

Remarks:

Arid West Ephemeral and Intermittent Streams OHW M Datasheet

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

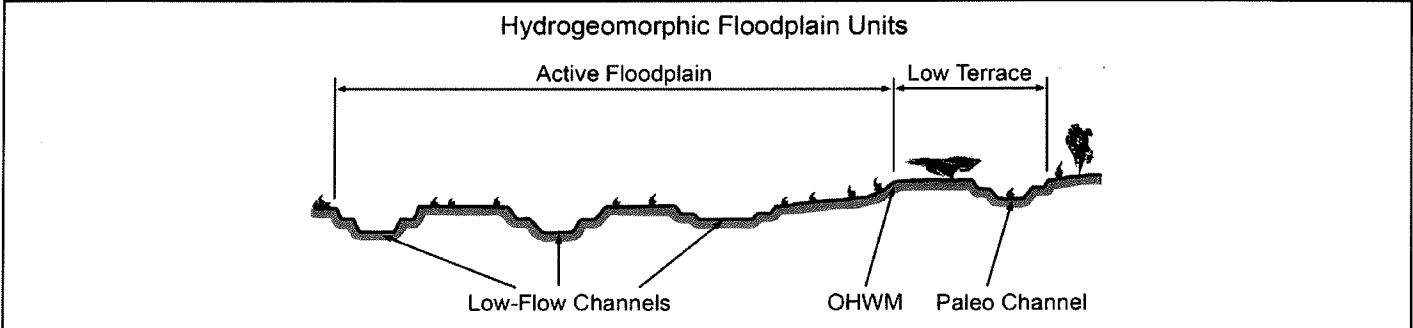
| | |
|--|---|
| Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Do normal circumstances exist on the site? Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Is the site significantly disturbed? | Location Details: Channel between Skyview Road end points. Projection: 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):

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



- 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:

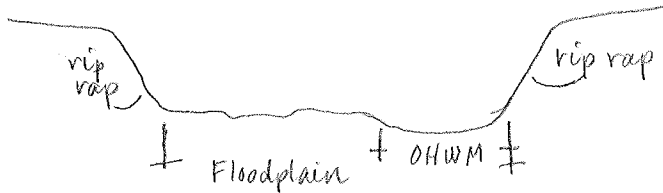
| | |
|--|---------------------------------|
| <input checked="" type="checkbox"/> Mapping on aerial photograph | <input type="checkbox"/> GPS |
| <input type="checkbox"/> Digitized on computer | <input type="checkbox"/> Other: |

Project ID: Sky-view Rd. Cross section ID: 51

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: 10 % Tree: 16 % 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.