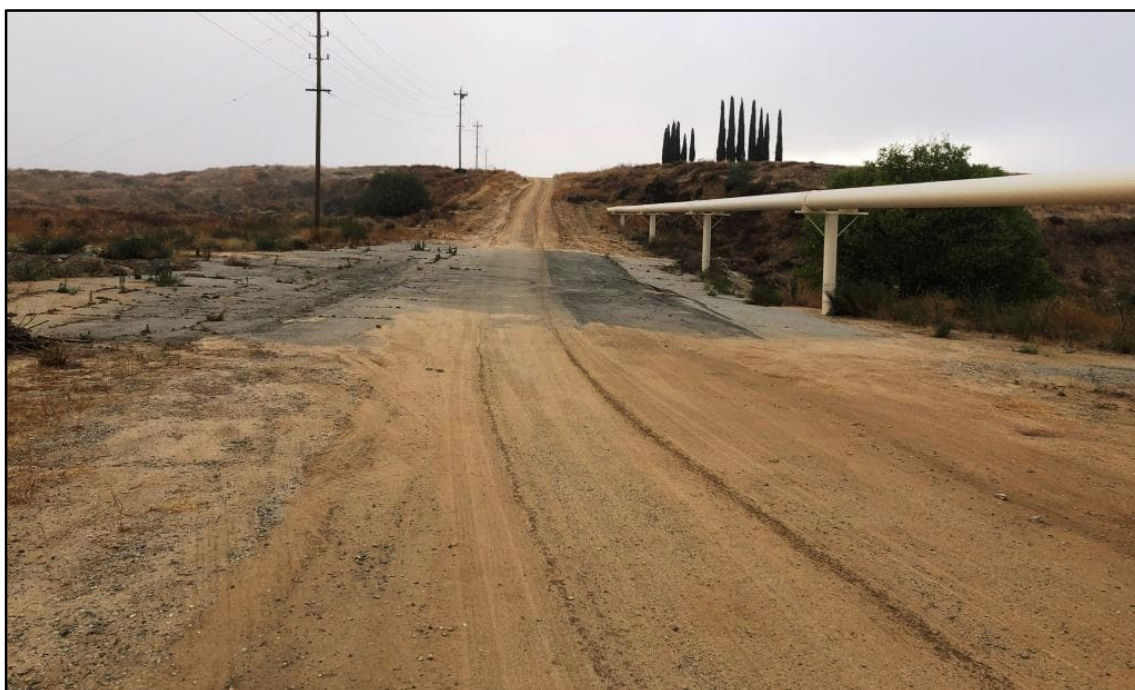


## **Appendix B.7**

WESTERN RIVERSIDE COUNTY  
MULTIPLE SPECIES HABITAT CONSERVATION PLAN  
DETERMINATION OF BIOLOGICALLY EQUIVALENT OR  
SUPERIOR PRESERVATION REPORT

SUN LAKES BOULEVARD EXTENSION PROJECT



City of Banning and Unincorporated Riverside County, California

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WSP Job # 20-554-00800

Updated August 2024

### 1 EXECUTIVE SUMMARY

The proposed Sun Lakes Boulevard Extension Project (project) is a transportation project including construction of a new section of Sun Lakes Boulevard from Highland Home Road to Sunset Avenue (Figure 3) and intersection improvements within the city of Banning's existing and future road right of-way (ROW). The project encompasses approximately 19.4 acres of direct footprint (permanent impacts) and another 9.1 acres of temporary construction disturbance area (temporary impacts). Project staging and stockpiling will occur within the city's ROW. The project site is located within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). Surveys were performed for biological resources including riparian/riverine, narrow endemic plant species, special status fairy shrimp species, burrowing owl (*Athene cunicularia*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). No narrow endemic plant species, special status fairy shrimp species, burrowing owls, or Los Angeles pocket mice were detected, so they are not being mitigated for. Riparian/riverine resources were detected on the project site. There will be 0.37-acre of permanent impacts and 0.09-acre of temporary impacts to riverine/riparian resources.

The city intends to purchase land or conserve and enhance existing city land within the Whitewater Watershed, along Smith Creek which would be placed into a conservation easement or have a deed restriction and protected in perpetuity with a non-wasting endowment. The land will be managed by a third-party land manager such as Western Riverside County Regional Conservation Authority (RCA), Rivers and Lands Conservancy (RLC) or Inland Empire Resource Conservation District (IERCD). The purchased conservation land will contain similar habitat to the project site and provide similar or superior function and habitat value. Currently, the project site has relatively unvegetated, sandy bottom, riverine habitat. Any mitigation areas that contain riparian habitat would be considered superior habitat.

Permanent impacts will be mitigated at a 3:1 ( $3 \times 0.37 = 1.11$  acres) ratio and temporary impacts will be mitigated at a 2:1 ratio ( $2 \times 0.09 = 0.18$  acres). The total mitigation acreage should equal or surpass 1.3 acres. The primary method of mitigation will be offsite conservation and enhancement of City owned property located along Smith Creek. The City will place at least 1.3 acres into a Conservation Easement with an approved third-party conservation holder such as Western Riverside County Regional Conservation Authority (RCA), Rivers and Lands Conservancy (RLC) or Inland Empire Resource Conservation District (IERCD). Additionally, the City has committed to participating in a regional

solution of the sediment transport function of the Smith Creek watershed. The intended outcome of this regional solution is to bring the various stakeholders in this watershed together to work on a sediment management strategy to ensure sediment is transported efficiently and effectively to support ecological resources. The City's commitment to this regional solution will serve as providing rehabilitation mitigation for the overall impacts from this Project.

The project will also return temporary impact areas to their pre-existing contours and revegetate them with appropriate native species. The project will also mitigate and/or minimize impacts by following MSHCP Section 6.1.4 Urban Wildlands Interface Guidelines and MSHCP Volume I, Appendix C Standard Best Management Practices (BMPs).

Although no burrowing owls were found during the focused survey, because habitat and potential burrows are present, a preconstruction survey will be conducted. Should burrowing owls be detected at that time, an updated DBESP report will be prepared, and mitigation will be achieved through the project following all MSHCP guidelines and the direction of the Environmental Programs Department, Western Riverside County Regional Conservation Authority, and/or the Wildlife Agencies.

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## 2 INTRODUCTION

At the request of the Albert A. Webb Associates (Webb), WSP USA Inc. (WSP) prepared this Determination of Biologically Equivalent or Superior Preservation (DBESP) report for the proposed Sun Lakes Boulevard Extension project (project). The purpose of the DBESP report is to propose mitigation for impacts to Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) riparian/riverine resources present on the project site and to demonstrate that the proposed mitigation will provide an equivalent or superior preservation of habitat functions and values for these resources. The report also discusses MSHCP DBESP-requiring species, which were surveyed for and found to not be present on-site.

### 2.1 Project Area

The project is in the city of Banning, Riverside County, California (Figure 1) and includes the extension of Sun Lakes Boulevard eastward from its current termination point at Highland Home Road to the anticipated connection at Sunset Avenue. It is generally located south of Interstate 10, west of Sunset Avenue and east of Highland Home Road. It can be found in Section 7 of Township 3 South, Range 1 East of the *Beaumont, California*, United States Geological Survey (1978) 7.5-minute topographic quadrangle map (Figure 2). The elevation of the project site ranges from approximately 2,400 to 2,500 feet above sea level. The geographic coordinates near the middle of the site are 33.5512.85° North latitude and -116.5516.29° West longitude. The project occurs within portions of the following Assessor's Parcel Numbers (APN): 419140039, 537110013, 537110014, 537120023, 537120024, 537120025, 537120027, 537120028, 537120029, 537120030, 537120031, 537120033, 537120034, 537140001, 537140002, 538323024, and 538323029.

No off-site staging areas or off-site improvements are planned. No weed abatement or fuel modification zones have been identified. However, if unforeseen circumstances were to arise that required hazard reduction within an area considered environmentally sensitive or a part of the MSHCP Conservation Area, such as lands proposed for conservation on the adjacent project site, it would require approval from the appropriate agencies prior to any vegetation management activities. These could include but are not limited to the Western Riverside County Regional Conservation Authority (WRCRCA), California Department of Fish and Wildlife (CDFW), Regional Water Quality Control Board (RWQCB), United States Fish and Wildlife Service (USFWS), and the United States Army Corps of Engineers (USACE).

### 2.2 Project Description

The proposed project is a transportation project including construction of a new section of Sun Lakes Boulevard from Highland Home Road to Sunset Avenue (Figure 3) and

intersection improvements within the City of Banning's existing road right-of-way (ROW). The project is approximately 5,400 linear feet (1.02 mile). This report has been updated due to a change in the outline of the proposed impacts and to update all related figures. The updated project impacts include 19.4 acres of permanent impacts, 9.1 acres of temporary impacts. Project staging and stockpiling will occur within the City's ROW. Currently, Westward Avenue is a straight east-west unpaved dirt road between Highland Home Road and Sunset Avenue. The project crosses over three creeks, from west to east: Highland Wash, Smith Creek, and Pershing Creek. The project will include the construction of three sets of culverts to cross said creeks.

Surrounding land uses include residential subdivisions, public facilities, and open space. The approximately five-acres is currently undeveloped. Historically the project site was graded for agricultural purposes in the 1960's. It has remained vacant for the past 2 to 3 decades. Vegetation within the proposed project site consists of non-native grassland, California buckwheat scrub, and Riversidean alluvial fan sage scrub. Three deeply incised drainages and associated tributaries are present within the proposed project site. Structures within the general vicinity include city-owned wells, an agricultural storage shelter, and several easements for streets, utilities, gas and oil pipelines, landscaping, and communications systems are all located within the general proposed project alignment.

## 2.3 Existing Conditions

Adjacent to and south of the Sun Lakes Boulevard ROW are existing utilities that include three well sites and one wastewater lift station. Within Westward Avenue, there are many existing utility lines including, a potable water line, sanitary sewer line, recycled water line, fiber optics line, three oil lines, and an underground telephone line. Single-family homes are west of Highland Home Road. East of Sunset Avenue are single-family homes, a small number of commercial businesses, the Mt. San Jacinto College San Geronimo Pass Campus, and undeveloped open space, including habitat for biological elements of concern to the MSHCP. The project footprint outside of the facilities detailed above is currently undeveloped open space, including habitat for biological elements of concern to the MSHCP, as are areas to the north and south of the project.

### 2.3.1 *Fairy Shrimp and Vernal Pools*

Seasonal pooling that is suitable as fairy shrimp habitat was present, so wet and dry season focused surveys were conducted for listed fairy shrimp species in 2020 and 2021. (A copy of the Wet and Dry Season Fairy Shrimp Focused Survey Memo (WSP, May 14, 2024) is appended to this report.) Surveys were conducted in accordance with the USFWS protocol: *Survey Guidelines for the Listed Large Branchiopods* (USFWS 2015).

During the fairy shrimp surveys, jurisdictional delineation, focused plant surveys, and other project site visits, fairy shrimp habitat was observed for signs of vernal pool ecosystems. From the MSHCP (WRCRCA 2021a): “Vernal pools are ephemeral wetlands that form in shallow depressions underlain by a substrate near the surface that restricts the downward percolation of water. Depressions in the landscape fill with rainwater and runoff from adjacent areas during the winter and may remain inundated until spring or early summer, sometimes drying more than once during the wet season. Smaller pools can fill, and dry, and larger pools can hold water longer and may in the deeper portions support species that are more representative of freshwater marshes. Vernal pools are well-known for their high level of endemism and abundance of rare, threatened, or endangered species. Many vernal pools are characterized by concentric rings of plants that flower sequentially as the pools dry. Vernal pools are dominated by native annual plants, with low to moderate levels of perennial herbaceous cover.”

### *2.3.2 Jurisdictional Delineation Methods*

On 18 April 2024, WSP senior biologist Dale Hameister conducted a jurisdictional survey of the project site (a copy of the Jurisdictional Delineation Report dated May 2024 is appended to this document, WSP 2024f). Drainages were evaluated for wetland/riparian-associated vegetation, clearly defined bed and bank features, wetland soils, and/or evidence of an ordinary high watermark that would potentially be considered jurisdictional by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, CDFW, and/or MSHCP.

## 2.4 Results/Impacts

### *2.4.1 Results/Impacts to MSHCP Section 6.1.2 Riparian Bird Species*

MSHCP Section 6.1.2 riparian bird species least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo require tracts of riparian woodland, and/or forest sufficient in size to support breeding territories. Surface water is often a component of suitable habitats. No surface water or sufficiently sized tracts of habitat are present on the project site, so no focused surveys were conducted for these species, and they are not expected to occur. Therefore, no impacts will occur to these species.

### *2.4.2 Results/Impacts to Vernal Pools*

None of the project site fairy shrimp habitat was determined to also be a vernal pool ecosystem as defined in Section 2.3.1 above. The project site fairy shrimp habitat was barren or dominated by non-native weedy plants and occurred in compacted soil in road ruts and other human alterations of the environment, which impeded drainage. Therefore, no vernal pools are present so no impacts will occur to vernal pools.

#### *2.4.3 Results/Impacts to Fairy Shrimp*

Wet and dry season focused surveys (WSP 2024a) for special status fairy shrimp species detected only the common versatile fairy shrimp (*Branchinecta lindahli*), which is not federally, or state listed as an endangered or threatened species or as a special status species. Therefore, no special status fairy shrimp species are present so no impacts will occur to special status fairy shrimp species.

#### *2.4.4 Results/Impacts to Riparian/Riverine Waters*

A copy of the Jurisdictional Delineation report (JD Report) prepared for this project by WSP in June 2024 is appended to this report (WSP 2024f). The following riparian/riverine resources were identified on-site and based on the observations made for the JD Report:

Highland Wash is an ephemeral drainage containing riparian and riverine resources that flows from north to south and crosses perpendicular to the proposed project. Flow originates from north of Interstate 10 and from the Sun Lakes community immediately northwest of the project.

In the area of the project, Highland Wash contains an active low flow channel with adjacent active floodplain that is bordered on the west with low terraces and on the east are incised channel walls that are both bordered by uplands. The active low-flow channel is approximately 12-inches wide in the project area with a silty/sandy bed and no vegetation. Evidence of flows were identified by benches and drift present in the project area. The adjacent active floodplain varies from roughly 3-feet to 15-feet wide and evidenced by a more pebbly substrate than the low flow channel, as well as ripples, older drift, presence of bed and bank, benches and no vegetation. The ordinary high-water mark (OHWM) is approximately 8 inches and indicated by break in slope and change in vegetative cover from active floodplain to low terrace. The low terrace borders the floodplain on the west with mid-stage upland vegetation consisting of California buckwheat that uniformly dominates the drainage area from the low terrace to the nearby hill tops. The outer limit of the low terrace is characterized by a higher vegetative density of buckwheat and marks the limit of potential CDFW jurisdiction.

Highland Wash likely flows for less than 3 months per year and is therefore does not have permanent flow and would not be considered USACE jurisdictional. Highland Wash joins with Smith Creek at Westward Avenue.

Smith Creek is an ephemeral drainage containing riparian and riverine resources that flows from north to south and crosses perpendicular to the proposed project and east of Highland Wash. Flow to Smith Creek originates from a large watershed area north of Interstate 10. In the area of the project, Smith Creek contains an active low flow channel with adjacent active floodplain that is bordered with low terraces. The active low-flow channel is approximately 8 inches wide with a silty/sandy bed and no vegetation. Evidence of flows were identified by benches and drift present in the project area. The adjacent active floodplain was on average 20 feet wide and the limits of which evidenced by a more pebbly substrate than the low flow channel, as well as ripples, older drift, presence of bed and bank, benches and limited pockets of early stage vegetation. OHWM is approximately 6 inches and indicated by break in slope and changes in vegetative cover and sediment texture from active floodplain to low terrace. The low terrace borders the floodplain on the west with late-stage upland vegetation consisting mostly of California buckwheat that uniformly dominates the drainage area from the low terrace to the nearby hill tops. The outer limit of the low terrace is characterized by change in slope and a higher vegetative density of California buckwheat and marks the limit of potential CDFW jurisdiction.

Smith Creek likely flows for less than 3 months per year and is therefore does not have permanent flow and would not be considered USACE jurisdictional. Highland Wash joins with Smith Creek at Westward Avenue. Smith Creek is tributary to San Geronimo Creek, which is tributary to the Whitewater River.

Pershing Creek is a wide ephemeral drainage containing riparian and riverine resources that flows from north to south and crosses perpendicular to the proposed project. It is located east of Smith Creek. Flows to Pershing Creek originate from north of Interstate 10. In the area of the project, Pershing Creek splits around an island approximately 0.24-acre in size of Riversidean alluvial fan sage scrub into two sets of active low flow channels with adjacent active floodplains. The Riversidean alluvial fan sage scrub is dominated by scale broom. The active low flow channels are approximately 10 inches wide in the project area with a fine sandy bed and no vegetation. Evidence of flows were identified by benches and ripples present in the project area. The active floodplain is on average 38-feet wide and bordered by short low terraces that are bordered by steep embankments that are roughly 20-feet high to the east and west of the creek. One mature eucalyptus tree (*Eucalyptus* species) on the far westerly bank is also within the project area. The active floodplain is evidenced by a more sandy/pebbly substrate than the low flow channel, as well as older drift, mud cracks, and early-stage vegetation of buckwheat and annual filarees (*Erodium*

species). OHWM is approximately 10-inches and indicated by break in slope and changes in vegetative cover and sediment texture from active floodplain to low terrace. The low terrace borders the floodplain on the west with silty soil and 95% cover of latestage upland vegetation consisting of California buckwheat that uniformly dominates the drainage area from the low terrace to the nearby hill tops. The outer limit of the low terrace on the east side of the creek is characterized by a change in slope and higher vegetative density of buckwheat and marks the limit of potential CDFW jurisdiction. The outer limit on the west side of the creek is characterized by a near-vertical incised channel bank.

Pershing Creek likely flows for less than 3 months per year and is therefore does not have permanent flow and would not be considered USACE jurisdictional. Pershing Creek merges with Smith Creek far downstream of the project limits.

Existing Culverts under Westward Avenue are riverine resources and potentially CDFW and RWQCB jurisdictional waters because although they are confined and man-made, they convey flow from the three preceding drainages across Westward Avenue. There are a total of 6 culverts of varying diameters and lengths for a total footprint of approximately 0.02 acre within the project limits.

#### Highland Wash

- 18-inch diameter, 24 feet long
- 54-inch diameter, 27 feet long
- 54-inch diameter, 10 feet long
- Smith Creek
- 48-inch diameter, 35 feet long
- Pershing Creek
- 48-inch diameter, 45 feet long 48-inch diameter, 44 feet long

Table 1 lists the riparian/riverine and potentially jurisdictional features within the project footprint with additional details on each pursuant to USACE criteria. Figure 4 identifies all observed project site riparian/riverine resources and highlights the resources that require mitigation and therefore triggered the need for this DBESP.

Flow from the project site drainages enters the MSHCP Conservation Area approximately 4.5 miles downstream in the San Geronio Pass Special Linkage Area.

The functions and values of the project site drainages and the surrounding upland loams include absorption and the gradual release of water into the downstream MSHCP Conservation Area. The drainages also provide sediment transport to downstream areas.

The conclusion of the Northwest Hydrological Consultants technical memorandum (NCH 2024) on the project site indicates that there would likely be minimal sediment transport impacts associated with the current crossing improvement plans. Hydraulic conditions upstream of all three of the proposed crossings are very comparable under pre- and post-project scenarios. To arrive at the proposed culvert design, an iterative process was undertaken to achieve a design that would have an insignificant change in the water surface elevation and velocity upstream and downstream of the proposed culverts as compared to the pre-project condition. The design will not improve nor worsen the existing flow of sediment occurring in the Project area. Therefore, if a rainfall event occurs that is large enough to transport sediment, the Project will not inhibit that from happening in the future post-construction condition. Where impacts are unavoidable, the design maintains the existing hydrologic regime including flood flows, and sediment transport. Based on the analysis by NHC, the Project effects on downstream functions will be insignificant and they will continue as they currently do, meaning, erosion or accretion that occurs outside of the Project within Smith Creek or Pershing Creek will not change as a result of the Project. Offsite erosion or accretions in said creeks are the result of other actions unrelated to the Project for which the City plans to address separately from this Project. Note that the with-project hydraulic simulation results reflect proposed as-built conditions and assume the crossing openings are clear of accumulations and the support piers are clear of debris at the time of the peak flow event. It is recommended that regular inspections and clearing (as needed) of the crossings be conducted to maintain these conditions. Maintenance inspections should occur, at minimum, annually prior to flood season and after any significant runoff event. Pier nose extensions (debris fins) are at the front end of the support piers, to minimize the impact of pier debris accumulation on upstream hydraulics during flood events.

The topography and vegetation in the project site drainages also provide cover and corridors for the shelter and movement of wildlife. The Project will include the construction of three sets of culverts to cross said creeks. The culverts are multi-cell reinforced concrete box (RCB) channels running under the proposed Sun Lakes Boulevard roadway extension. Straight wing walls with concrete and riprap aprons will be constructed at the upstream end of each channel while vertical wing walls and concrete aprons will be provided at the downstream end of channels. Concrete ramps will be constructed at the south end of the channels to provide maintenance access. Swales and trapezoidal channels will be provided to intercept stormwater run-on from north of the Project and discharge it to the proposed channels. The project will retain existing culverts

such that sediment transport and wildlife movement functions and values will be retained.

## DBESP Report

Table 1. Project Site Riparian/Riverine Acreage

| Name of Potential Aquatic Feature                         | Cowardin Type        | Area, Length, Width                                                                              | Summary of OHWM Presence                                                                   | Summary of Wetland Presence | Dominant Vegetation / Listing Status                                                                                                                                                              | Location               | Potentially Jurisdictional?         |
|-----------------------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------|
| Highland Wash<br>(Creek Crossing No. 1; Proposed Line J)  | R4SBJ <sup>(a)</sup> | 0.12 acre                                                                                        | Change in vegetation, break in slope                                                       | None                        | <i>Eriogonum fasciculatum</i> / Not Listed <sup>(c)</sup>                                                                                                                                         | 33.918220, -116.924808 | Yes;<br>CDFW and RWQCB non-wetland  |
|                                                           |                      | 403 feet                                                                                         |                                                                                            |                             |                                                                                                                                                                                                   |                        |                                     |
|                                                           |                      | 15 feet <sup>(b)</sup>                                                                           |                                                                                            |                             |                                                                                                                                                                                                   |                        |                                     |
| Smith Creek<br>(Creek Crossing No. 2; Proposed Line I)    | R4SBJ <sup>(a)</sup> | 0.12 acre                                                                                        | Change in average sediment texture, change in vegetation cover, break in slope             | None                        | <i>Eriogonum fasciculatum</i> / Not Listed <sup>(c)</sup>                                                                                                                                         | 33.918290, -116.923923 | Yes;<br>CDFW and RWQCB non-wetland  |
|                                                           |                      | 256 feet                                                                                         |                                                                                            |                             |                                                                                                                                                                                                   |                        |                                     |
|                                                           |                      | 20 feet <sup>(b)</sup>                                                                           |                                                                                            |                             |                                                                                                                                                                                                   |                        |                                     |
| Pershing Creek<br>(Creek Crossing No. 3; Proposed Line K) | R4SBJ <sup>(a)</sup> | 0.23 acre                                                                                        | Change in average sediment texture, change in vegetation species and cover, break in slope | None                        | Riversidean alluvial fan sage scrub dominated by <i>Lepidospartum squamatum</i> / a facultative upland plant species <sup>(c)</sup> and <i>Eriogonum fasciculatum</i> / Not Listed <sup>(c)</sup> | 33.918245, -116.914588 | Yes;<br>CDFW and RWQCB, non-wetland |
|                                                           |                      | 286 feet                                                                                         |                                                                                            |                             |                                                                                                                                                                                                   |                        |                                     |
|                                                           |                      | 38 feet <sup>(b)</sup>                                                                           |                                                                                            |                             |                                                                                                                                                                                                   |                        |                                     |
| Existing Culverts Under Westward Avenue                   | Not Applicable       | 6 pipes of varying sizes for combined length of 185 feet and area of 0.02 acre (700 square feet) | Not Applicable                                                                             | None                        | None                                                                                                                                                                                              | Varies                 | Yes;<br>CDFW and RWQCB, non-wetland |

<sup>(a)</sup> = R4SBJ: "Riverine, Intermittent, Streambed, Intermittently Flooded" based on Cowardin et al. (1979)

<sup>(b)</sup> = Widths are average widths in the Project limits.

<sup>(c)</sup> = Listing status refers to the National Wetland Plant List.

The existing culverts located under Westward Avenue will be abandoned in place but remain functional. Therefore, they are not included in the impact areas. Otherwise, all identified project site riparian/riverine drainages and areas will be permanently or temporarily impacted (Table 2).

**Table 2. Project Site Riparian/Riverine Impacts**

| Name of Potentially Jurisdictional Feature | Riverine/Riparian         |                                 | Length (feet) |
|--------------------------------------------|---------------------------|---------------------------------|---------------|
|                                            | Permanent Impacts (acres) | Temporary Impacts (acres)(feet) |               |
| Highland Wash (Creek Crossing No. 1)       | 0.1                       | 0.01 (61)                       | 403           |
| Smith Creek (Creek Crossing No. 2)         | 0.08                      | 0.04 (65)                       | 256           |
| Pershing Creek (Creek Crossing No. 3)      | 0.2                       | 0.03 (72)                       | 286           |
| Total                                      | 0.38                      | 0.09                            | 945           |

## 2.5 Mitigation and Equivalency

No listed or special-status fairy shrimp species or vernal pool ecosystems were detected, and no habitat is present for least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. Therefore, no mitigation or equivalency will be required for these riparian/riverine resources as a result of project implementation, and they will not be discussed further. There will be effects to riparian/riverine waters, and those are discussed below.

### 2.5.1 Direct Effects to Riparian/Riverine Waters

All riparian/riverine waters on the project site will be directly affected. The city intends to conserve and enhance existing city land within the Whitewater Watershed, along Smith Creek which would be placed in a conservation easement or have a deed restriction and protected in perpetuity with a non-wasting endowment. The land will be managed by a third-party land manager such as Western Riverside County Regional Conservation Authority (RCA), Rivers and Lands Conservancy (RLC) or Inland Empire Resource Conservation District (IERCD). The conservation land contains similar habitat to the project site and provides similar or superior function and habitat value. Currently, the project site

has relatively unvegetated, sandy bottom, riverine habitat. Any mitigation areas that contain riparian habitat would be considered superior habitat.

Permanent impacts will be mitigated at a 3:1 ( $3 \times 0.37 = 1.11$  acres) ratio and temporary impacts will be mitigated at a 2:1 ratio ( $2 \times 0.09 = 0.18$  acres). The total mitigation acreage should equal or surpass 1.3 acres. The primary method of mitigation will be offsite conservation and enhancement of City owned property located along Smith Creek. The City will place at least 1.3 acres into a Conservation Easement with an approved third-party conservation holder such as Western Riverside County Regional Conservation Authority (RCA), Rivers and Lands Conservancy (RLC) or Inland Empire Resource Conservation District (IERCD). Additionally, the City has committed to participation in a regional solution of the sediment transport function of the Smith Creek watershed. The intended outcome of this regional solution is to bring the various stakeholders in this watershed together to work on a sediment management strategy to ensure sediment is transported efficiently and effectively to support ecological resources. The City's commitment to this regional solution will serve as providing rehabilitation mitigation for the overall impacts from this Project.

The project will also return temporary impact areas to their pre-existing contours and revegetate them with appropriate native species. The project will follow MSHCP Volume I, Appendix C Standard Best Management Practices and MSHCP Section 6.1.4 Urban Wildlands Interface Guidelines (WSP 2024e).

With implementation of the above measures, the project would achieve mitigation and equivalency and ensure the long-term maintenance of the wildlife movement and sediment transport functions and values of the riparian/riverine resource(s).

#### *2.5.2 Indirect Effects*

A potential indirect effect of concern to the MSHCP is the replacement of permeable soils surrounding riparian/riverine with impermeable surfaces such as road pavement and sidewalks. This can cause increased short-term flow volume, pollution, and erosion during rain events. The project will mitigate this issue by installing drainage improvements which will include catch basin filters and the retention of stormwater runoff in underground infiltration chambers. These improvements will capture the short-term increased flow and slowly release it, thus avoiding erosional pulses and gives debris and pollutants time to settle and filter out. Otherwise, these or any other indirect effects will be mitigated through the measures and mitigation identified in the previous section (2.5.1). These actions will achieve mitigation and equivalency and ensure

the long-term maintenance of the wildlife movement and sediment transport functions and values of the riparian/riverine resource(s).

### 3 NARROW ENDEMIC PLANT SPECIES MITIGATION (MSHCP SECTION 6.1.3)

The project site is within the Narrow Endemic Plant Species Survey Area (NEPSSA) for Marvin's onion (*Allium marvinii*) and many stemmed dudleya (*Dudleya multicaulis*) and suitable habitat is present on site for those species. Therefore, focused surveys were conducted for these narrow endemic plants (NEPS).

#### 3.1 Methods

The focused survey (WSP 2024b) was conducted on 26 and 27 May 2020 by WSP biologists Dale Hameister and Nathan T. Moorhatch (A copy of the NEPSSA survey report dated May 2024 is appended to this report). The survey was conducted during the appropriate time of year (blooming period) for the detection of the NEPSSA species and followed a period of above average rainfall for the 2019-2020 season. Areas of suitable habitat were surveyed utilizing transects which were adjusted based on topography and habitat coverage so that all potential NEPSSA habitat was surveyed.

#### 3.2 Results/Impacts

Marvin's onion and many stemmed dudleya were not observed or otherwise detected during the focused survey. As a result, impacts to NEPS will not occur as a result of project implementation.

#### 3.3 Mitigation and Equivalency

Because no NEPS were detected, no impacts will occur. For these reasons, mitigation and/or equivalency requirements relative to NEPS are not anticipated to be required for the project.

##### 3.3.1 *Direct Effects*

Because no NEPS were detected, direct effects to them are not anticipated.

##### 3.3.2 *Indirect Effects*

Because no NEPS were detected, indirect effects to these plant species are not anticipated.

## 4 ADDITIONAL SURVEY NEEDS (MSHCP SECTION 6.3.2)

### 4.1 Criteria Area Species Survey Area - Plants

The project site is not within a Criteria Area Species Survey Area (CASSA) for Criteria Area plant species (CAPS).

#### *4.1.1 Methods*

Because the project site is not located within a CASSA for plants, focused surveys for CAPS are not required for MSHCP compliance and therefore were not conducted for the project.

#### *4.1.2 Results/Impacts*

No focused surveys for CAPS were required and none were found during focused surveys conducted for NEPS.

#### *4.1.3 Mitigation and Equivalency*

Because no surveys are required for CAPS on the project site, mitigation and/or equivalency requirements relative to CAPS are not required for the project.

##### *4.1.3.1 Direct Effects*

No direct effects to MSHCP-designated CAPS are anticipated to occur as a result of project implementation.

##### *4.1.3.2 Indirect Effects*

No indirect effects to MSHCP-designated CAPS are anticipated to occur as a result of project implementation.

### 4.2 Burrowing Owl

Burrowing owl habitat is present and the project site is within the MSHCP designated burrowing owl survey area so focused surveys were conducted (a copy of the Burrowing Owl Focused Survey dated May 2024 is appended to this report, WSP 2024c).

#### *4.2.1 Methods*

All burrowing owl surveys were conducted in accordance with protocol provided by the Riverside County Transportation and Land Management Agency (Environmental Programs Department “RCTLMA EPD” 2006a). Step I habitat assessment and Step II, Part A focused burrow surveys were conducted on 17 July 2020 by WSP senior biologist Nathan Moorhatch and WSP biologist Alec Williams. The non-native grassland vegetation and portions of the various drainages with California ground squirrel and other manmade “burrow surrogates” on and immediately adjacent to the project site provide suitable habitat for burrowing owls. The site was surveyed on foot, mapping the locations of California ground squirrel burrows and/or manmade “burrow surrogates” that were suitable for burrowing owl use. Step II, Part B focused burrowing owl surveys were then conducted by Moorhatch or Williams on 24 & 31 July and 6 & 12 August 2020. Surveys were completed via pre-dawn/early morning pedestrian transects spaced at 10 meters apart over 100% of those areas of the site identified in the burrow search as having burrows or structures capable of supporting burrowing owls. Binoculars were used to visually inspect potential perching locations (i.e., rocks, debris, dirt mounds) as well as the entrances to all on-site mammal burrows and debris providing potential shelter (i.e., piles of concrete slabs, cement drainpipes). Potential burrows were carefully examined for evidence of burrowing owl occupation (i.e., animal dung, feathers, whitewash, pellets, debris, etc.). Where buffer areas were not accessible, they were visually inspected using binoculars in accordance with protocol.

#### *4.2.2 Results/Impacts*

Potential burrow sites were present, but no burrowing owls or their sign were detected. Therefore, no impacts to burrowing owls are anticipated at this time.

#### *4.2.3 Mitigation and Equivalency*

Because no burrowing owls were detected, no impacts will occur. For this reason, mitigation and/or equivalency requirements relative to burrowing owls are not anticipated to be required for the project.

Note, however, that because the project site contains suitable, but currently unoccupied habitat (Figure 5), burrowing owls have the potential to colonize and occupy the project site at any time in the future. MSHCP guidelines require a one-visit pre-construction presence/absence surveys for burrowing owls within the survey area where suitable habitat is present, even where protocol level surveys were negative. Surveys will be conducted within 30 days prior to

disturbance. If burrowing owls are found at that time, refer to the following guidelines below.

The project site is not located within a Criteria Area, so the following MSHCP guidelines apply:

- “If the site contains, or is part of, an area supporting less than 35-acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the project site burrowing owls will be passively or actively relocated following accepted protocols.”
- “If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable Habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.”
- “RCTLMA EPD (2006b) states: “In the event owls are observed on the project site, please contact the EPD immediately to discuss potential mitigation measures such as passive or active relocation.” Further WRCRCA guidelines (2019a) include:
- Coordinate with WRCRCA and the CDFW on all evictions (passive or active relocation).
- Eviction may be acceptable if suitable conserved habitat and natural or artificial burrows are within 75–100 meters. Note that eviction during the nesting season is generally prohibited.
- If adjacent or nearby suitable habitat is not conserved, eviction may still be acceptable at the discretion of WRCRCA and/or CDFW.
- A *Burrowing Owl Protection and Relocation Plan* will be prepared if burrowing owls are detected during the preconstruction survey within 500 feet of the project footprint. The plan must be reviewed, approved, and coordinated with WRCRCA and Wildlife Agencies, including the state banding permit office and federal Migratory Bird Treaty Act office if active relocation is needed.

Should burrowing owls be detected, mitigation and equivalency will be achieved through the project following all MSHCP guidelines and the direction of the Environmental Programs Department, Western Riverside County Regional Conservation Authority, and/or the Wildlife Agencies.

### *4.2.3.1 Direct Effects*

Because no burrowing owls were detected, direct effects to them are not anticipated. See the Mitigation and Equivalency section above, however.

### *4.2.3.2 Indirect Effects*

Because no burrowing owls were detected, indirect effects to them are not anticipated. See the Mitigation and Equivalency section above, however.

## 4.3 Mammals

Los Angeles pocket mouse (LAPM) habitat is present and approximately 19.6-acres of the project site are within the MSHCP designated LAPM survey area, so focused surveys were conducted for the LAPM on consecutive nights from September 13-18, 2020 (a copy of the LAPM Focused Survey updated July 2024 is appended to this report, WSP 2024d).

### *4.3.1 Methods*

Trapping operations were conducted by WSP senior biologist John F. Green under the authority of CDFW Scientific Collecting Permit (SCP) #SC-190360007. A total of six grids of 25 traps each were placed (Grids A through F) See Figure 3 and photos below. One grid was placed in each drainage and the remaining three grids were placed in upland habitats. All grids were within the MSHCP-designated survey area for the Los Angeles pocket mouse.

To ensure that weather conditions were suitable to conduct the survey with minimal stress to captured animals, National Weather Service forecasts were monitored for the weather stations nearest the trapping areas. Trapping is not conducted unless five consecutive nights with temperatures above 50 degrees Fahrenheit are forecasted. At this time of year, no temperatures approached that threshold.

All traps were 12" long folding Sherman® live traps, modified by the manufacturer for the prevention of tail lacerations when trapping long-tailed animals (such as kangaroo rats). Traps were placed approximately ten meters apart and baited with white proso millet. Traps were opened at dusk daily, checked for captures at mid-night and dawn, and closed for the day following each dawn check. Trapping at each grid was conducted for five consecutive nights. Captured animals were identified and released at the point of capture. Capture data and weather variables were recorded on standardized data forms. Weather variables were recorded with a handheld Kestrel anemometer.

#### 4.4 Results/Impacts

No LAPM were detected during the focused survey. As a result, impacts to LAPM will not occur as a result of project implementation.

#### 4.5 Mitigation and Equivalency

Because no LAPM were detected, no impacts will occur. For these reasons, mitigation and/or equivalency requirements relative to LAPM are not anticipated to be required for the project.

##### *4.5.1 Direct Effects*

Because no LAPM were detected, direct effects to them are not anticipated.

##### *4.5.2 Indirect Effects*

Because no LAPM were detected, indirect effects to them are not anticipated.

#### 4.6 Amphibians

The project site is not within a MSHCP designated amphibian survey area.

##### *4.6.1 Methods*

Because the project site is not located within an MSHCP-designated survey area for amphibians, focused surveys for special status amphibians are not required for MSHCP compliance. For these reasons, focused surveys for special status amphibians were not conducted for the project.

##### *4.6.2 Results/Impacts*

Focused surveys for amphibians were not conducted for the project. Impacts to amphibian species with MSHCP designated survey areas are not anticipated to occur as a result of project implementation.

##### *4.6.3 Mitigation and Equivalency*

###### *4.6.3.1 Direct Effects*

No direct effects to amphibian species with MSHCP designated survey areas are anticipated to occur as a result of project implementation.

#### *4.6.3.2 Indirect Effects*

No indirect effects to amphibian species with MSHCP designated survey areas are anticipated to occur as a result of project implementation.

#### *4.7 Delhi Sands Flower-Loving Fly (MSHCP SECTION 9.3)*

The project site is not within the range of the Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) and does not contain any mapped or observed Delhi fine sand soils. For these reasons, focused surveys for the Delhi Sands flower-loving fly and mitigation for this species are unwarranted.

##### *4.7.1 Methods*

Because the project site does not contain habitat suitable for the Delhi Sands flower-loving fly and is not within the known range of the species, focused surveys for this species are not required for MSHCP compliance. For these reasons, focused surveys for the Delhi Sands flower-loving fly were not conducted for the project.

##### *4.7.2 Results/Impacts*

Focused surveys for the Delhi Sands flower-loving fly were not conducted for the project, as there is no habitat for the species. Impacts to the Delhi Sands flower-loving fly are not anticipated to occur as a result of project implementation.

##### *4.7.3 Mitigation and Equivalency*

###### *4.7.3.1 Direct Effects*

No direct effects to the Delhi Sands flower-loving fly are anticipated to occur as a result of project implementation.

###### *4.7.3.2 Indirect Effects*

No indirect effects to the Delhi Sands flower-loving fly are anticipated to occur as a result of project implementation.

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WRCRCA. 2019b. MSHCP\_DBESP\_Template\_revised\_04.11.19. Accessed at: <https://www.wrc-rca.org/document-library/>

### **FIGURES AND SUPPORTING APPENDICES**

Figure 1. Project Vicinity and Location

Figure 2. Project Location on USGS Topographic Map

Figure 3. Project Impacts

Figure 4. Riparian/Riverine Areas

Figure 5. Burrowing Owl Survey Area

WSP 2024a Wet and Dry Season Fairy Shrimp Survey Report

WSP 2024b Narrow Endemic Plant Species Survey Report

WSP 2024c Burrowing Owl Survey Report

WSP 2024d Los Angeles Pocket Mouse Survey Report

WSP 2024e MSHCP Consistency Analysis

WSP 2024f Jurisdictional Delineation Report

NHC 2024 High Level Assessment of Potential Sediment Transport Impacts  
Associated with the Updated Sun Lakes Boulevard Improvement Project

Service Layer Credits: World Street Map: Esri, HERE, Garmin, NGA, USGS, NPS

World Topographic Map: UC Riverside, County of Riverside, California State Parks, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land



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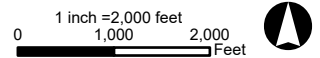
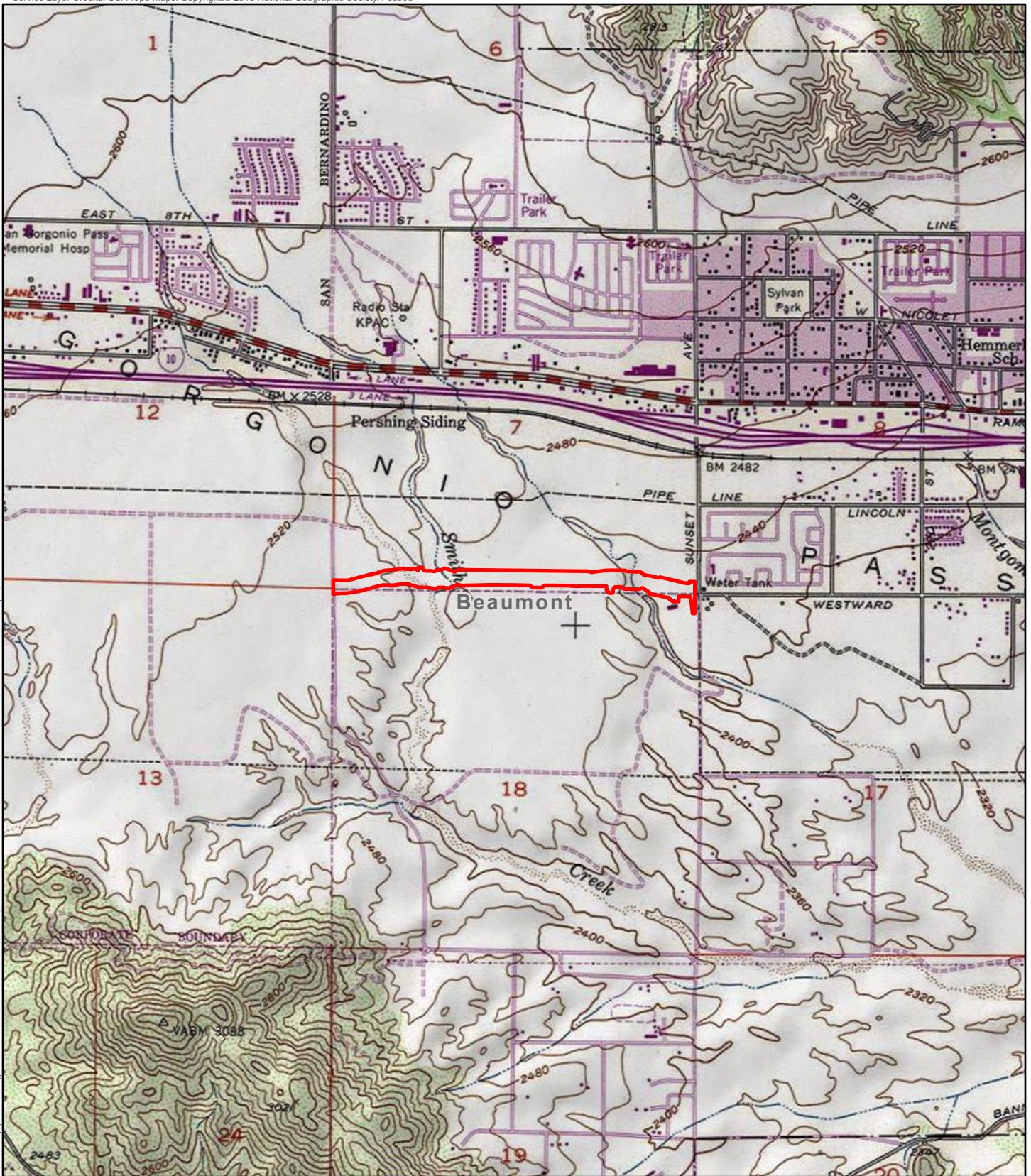
 Project Alignment

1 inch = 2 miles  
0 1 2 Miles



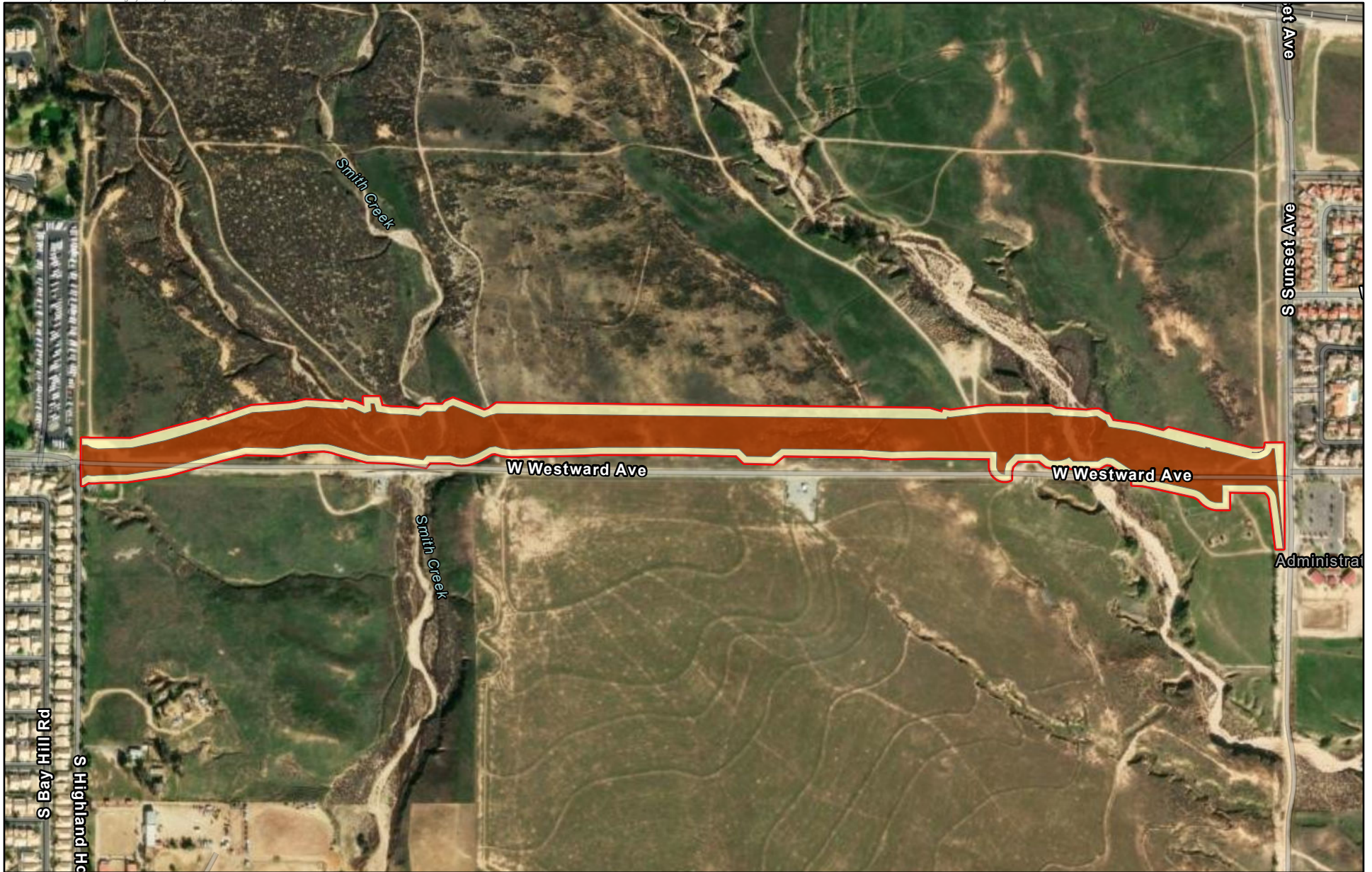
## FIGURE 1

Project Vicinity and Location  
DBESP  
Sun Lakes Blvd. Realignment Project  
Banning, CA



 Project Alignment

**FIGURE 2**  
USGS 7.5' Topo Quad: Beaumont  
DBESP  
Sun Lakes Blvd. Realignment Project  
Banning, CA



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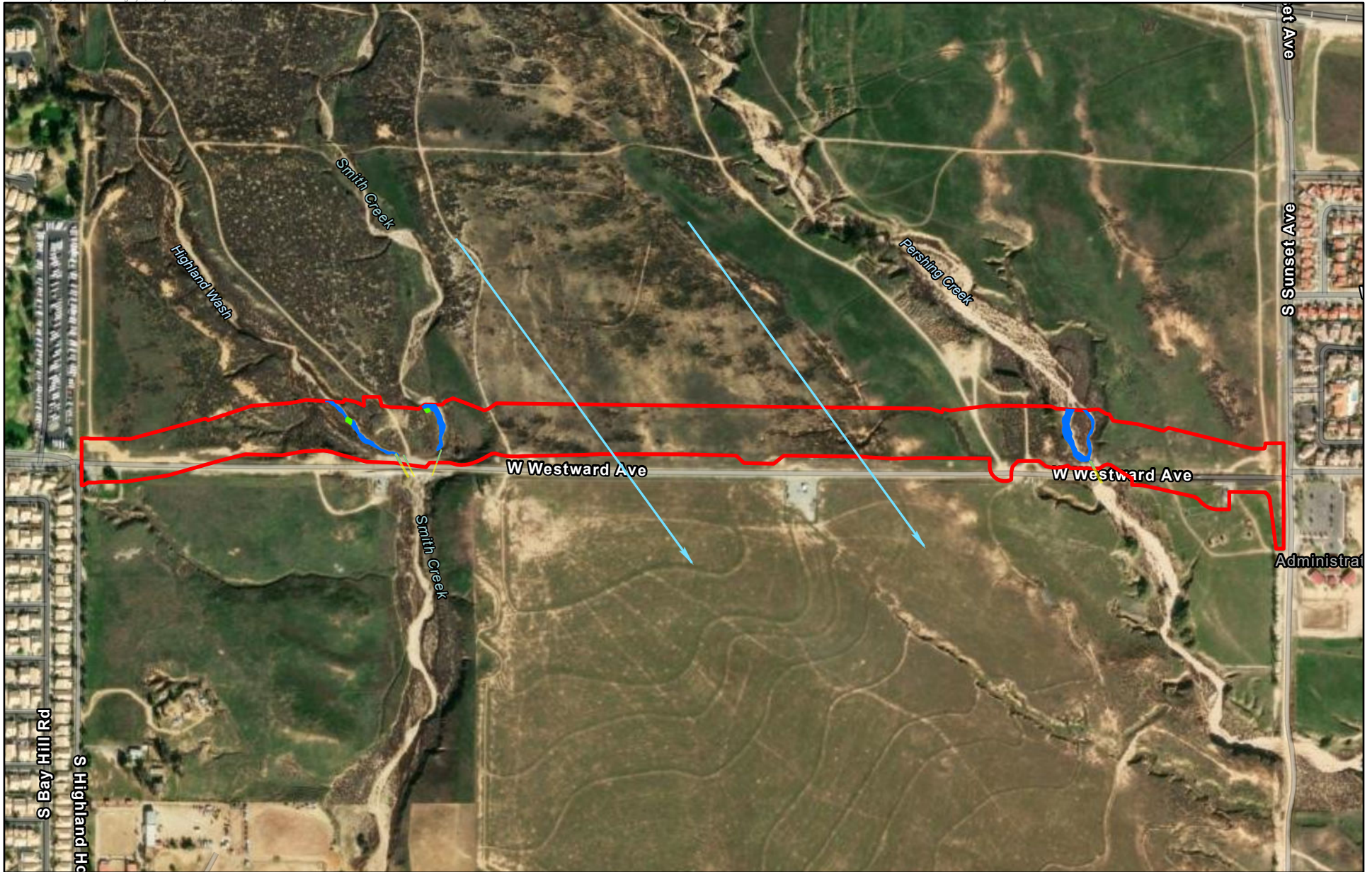
-  Project Alignment
-  Permanent Impacts (19.39 Acres)
-  Temporary Impacts (9.06 Acres)

1 inch = 600 feet  
0 300 600 Feet



## FIGURE 3

Project Impacts  
DBESP  
Sun Lakes Blvd. Realignment Project  
Banning, CA



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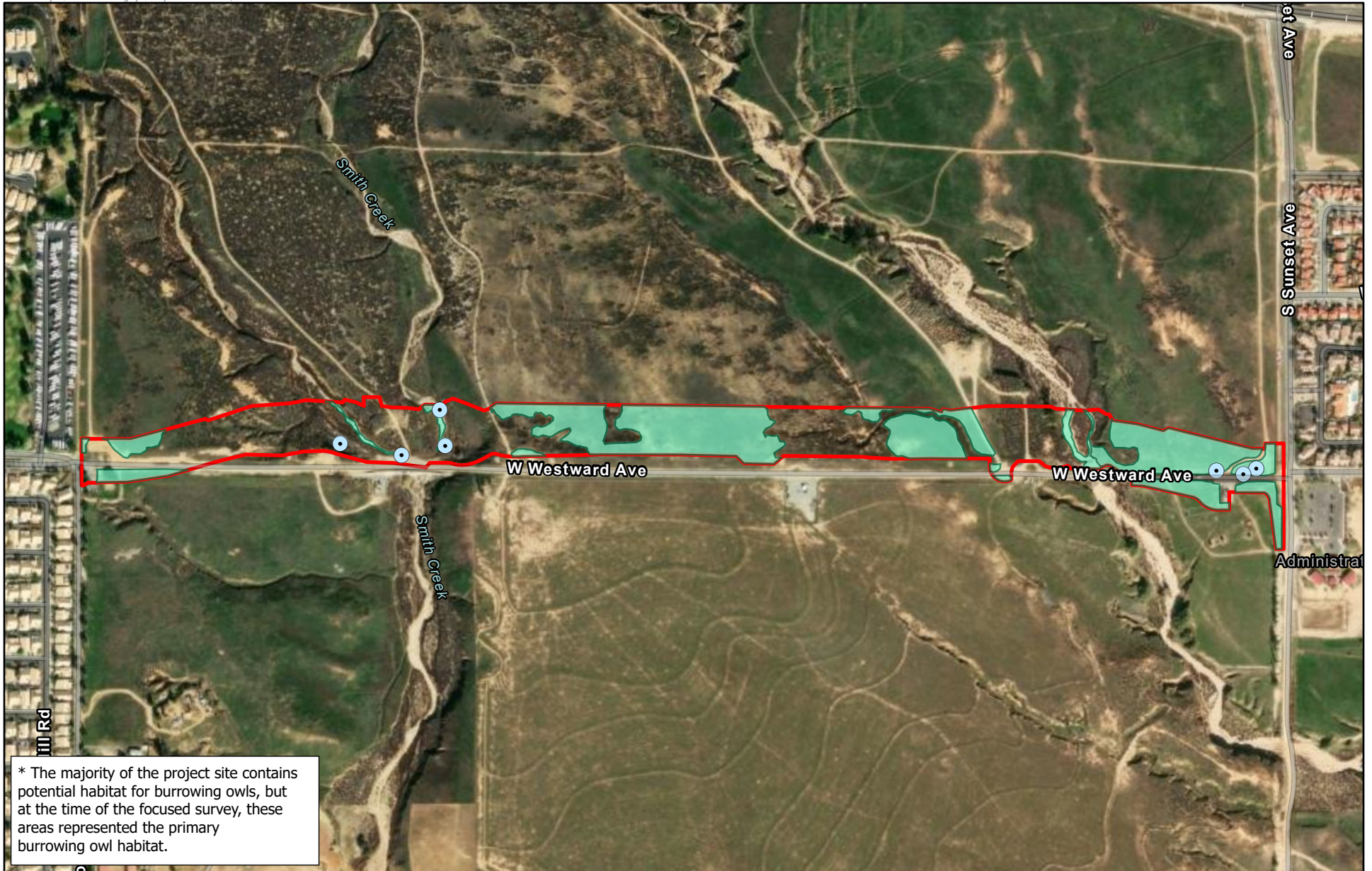
- Flow Direction
- Project Alignment
- MSHCP Riverine
- MSHCP Riparian
- Existing Culvert

1 inch = 600 feet  
0 300 600 Feet



## FIGURE 4

Riverine/Riparian Areas  
DBESP  
Sun Lakes Blvd. Realignment Project  
Banning, CA



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-  Potential Burrowing Owl Burrow Detections July-August 2020
-  Primary BUOW Habitat\*
-  Project Alignment

1 inch = 600 feet  
0 300 600 Feet



## FIGURE 5

Burrowing Owl Survey Area  
DBESP  
Sun Lakes Blvd. Realignment Project  
Banning, CA