Pico Rivera Regional Bikeway Project

Natural Environment Study

Includes Focused Studies for Special Status Plants and a Delineation of Federal and State Jurisdictional Water Resources

Pico Rivera, Los Angeles County, California

Project Number ___

May 2019

Caltrans
CALIFORNIA DEPARTMENT OF TRANSPORTATION

Natural Environment Study

STATE OF CALIFORNIA
Department of Transportation

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District/Region

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Summary

The Project will install a bicycle/pedestrian bridge, Class II bicycle lanes, a Class I shared-use path traffic calming medians, sidewalks, curb ramps, signal modifications, and wayfinding signage, connecting two regional Class I routes.

Natural resource surveys including a jurisdictional delineation, general biological survey, and focused rare plant survey were completed by VCS Environmental (VCS) and Kidd Biological Inc. (KBI) biologists. A total of 2.72 acres of impacts, including 2.72 acres of temporary and 0.001 acre (57 square feet) of permanent impacts, will occur to jurisdictional waters within the San Gabriel River within the Project's construction footprint. This area of impacts is subject to jurisdiction under the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). These impacts will require a USACE Section 404 permit, a RWQCB Section 401 Water Quality Certification, and a CDFW Section 1600 Streambed Alteration Agreement. Habitats within these impacted waters are generally classified as wetland, emergent wetland, and non-wetland for USACE and RWQCB, and riparian, emergent riparian, and streambed for CDFW. The vegetation classifications that occur within these habitats include: black willow thicket, mulefat thicket, California bulrush marsh, sedge patches, ragweed patches, upland mustards, and annual barley grassland. Additional non-vegetated land cover types within the impacted jurisdictional waters include open water, streambed, and disturbed/developed. There are no impacts to sensitive vegetation communities outside of the jurisdictional waters impacts.

Two special status plant species were observed during the rare plant survey and were located outside of the anticipated Project Impact Area footprint. Additionally, there is potential for six additional special status plant species to occur within the Project Impact Area and vicinity. No special status wildlife species were observed during project surveys, but there is the potential for two special status wildlife species to occur within or near the Project Impact Area.

Avoidance and minimization measures will be incorporated into the Project to address potential indirect, temporary, and direct impacts to natural resources within the Project Impact Area and in the Project vicinity.

Mitigation for permanent impacts to jurisdictional waters and associated habitat will be at a 2:1 ratio and 1:1 ratio for temporary impacts to jurisdictional waters and associated habitat due to temporal loss. Mitigation for permanent impacts will be obtained through an approved mitigation bank or In Lieu Fee Program.

With implementation of the avoidance/minimization measures and mitigation outlined in this report, the Project is anticipated to have no cumulative impacts on natural resources.

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Chapter 1 – Introduction

The Project site is located in the City of Pico Rivera, County of Los Angeles, California; approximately 2.5 miles from the southern City limits and 3.5 miles from the northern City limits. The Project site is approximately 0.30 miles west of the Interstate 605 freeway (I-605) between Whittier Boulevard and Mines Avenue to the west and Dunlap Crossing Road to the east. The bike lanes on Mines Avenue will run the width of the City. The Project is located within the San Bernardino Meridian, Township 2S, Range 11W, Section 18. A regional location and vicinity map are attached as Figures 1 and 2, respectively. The Study Area included Mines Avenue, Dunlap Crossing Road, the pathway around the spreading grounds adjacent to the San Gabriel River, and the portion of the San Gabriel River to be impacted.

The Project will create the city's first on-street bicycle facility. Bike lanes on Mines Avenue will run the width of the city and will be centrally located: 2.5 miles from the southern city limits and 3.5 miles from the northern city limits. This Project will also create the City's first on-street connection between two regional bike trails. Existing connections create an inconvenient path for bicycling commuters thus many choose to ride direct routes without dedicated on-street bike facilities. By providing an east-west connection between the regional north-south oriented San Gabriel River and Rio Hondo shared use paths, the Project will improve bicycle travel through the City of Pico Rivera with origins or destinations in nearby cities.

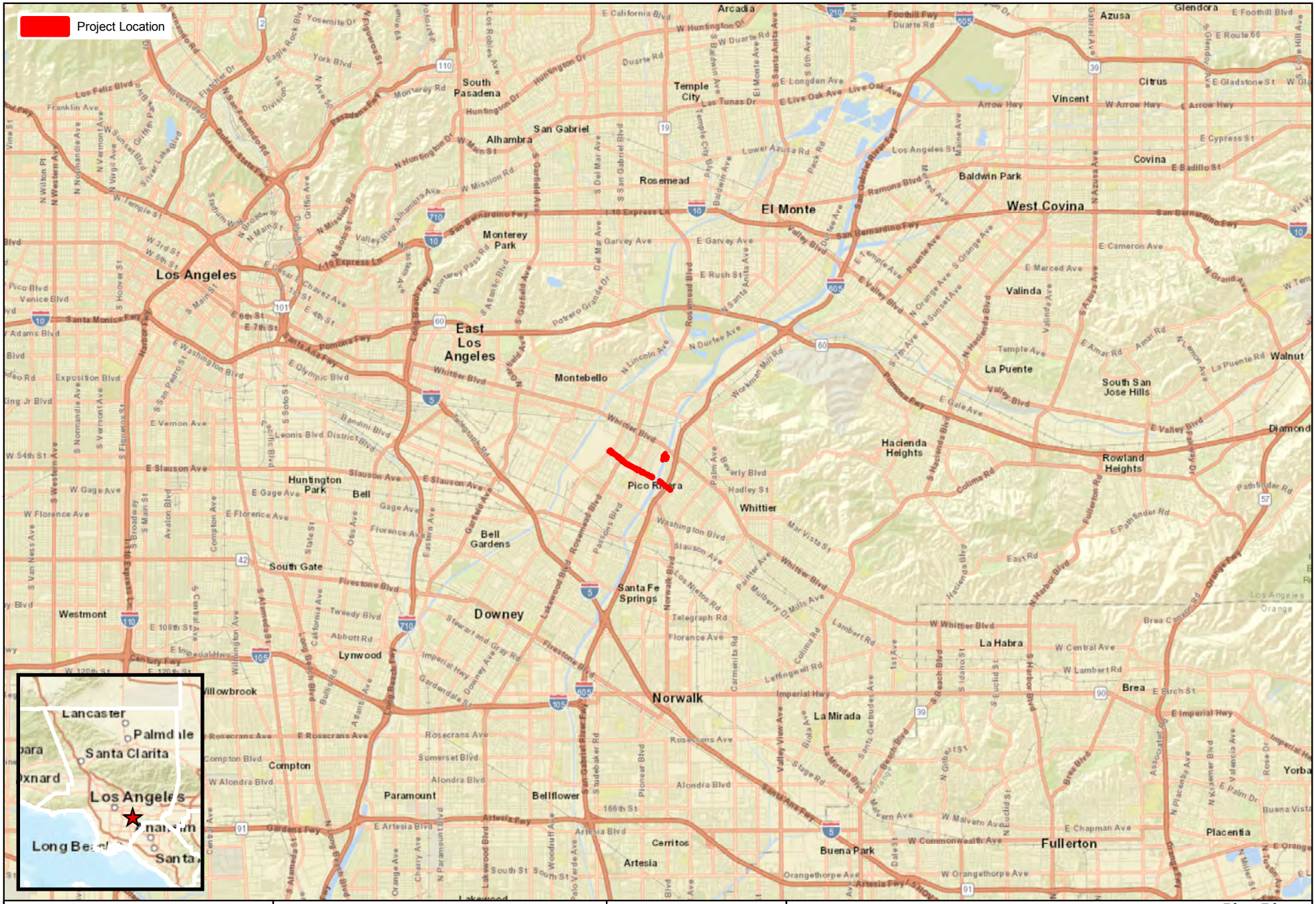
Project History

Regional bicycle and off-road biking trails exist along the eastern side of the San Gabriel River (San Gabriel River Bike Trail) and the western side of the Rio Hondo Channel (called the Lario Bike Trail). These regional trails provide off-street bicycle and pedestrian access to the Whittier Narrows Recreation Area to the north, adjacent cities to the south, and the Pacific Ocean.

The Proposed Project would provide an east-west connection to San Gabriel River Bike Trail and the Lario Bike trail.

Project Description

The Project consists of a 1.5-mile bicycle facility along Mines Avenue, a bike/pedestrian bridge over the San Gabriel River, and a bicycle facility along Dunlap Crossing Road. The Project would construct a Class IV separated bikeway along Mines Avenue from Paramount Boulevard in the west to the existing Class I bike trail along the San Gabriel River in the east. The Project also includes a new bridge structure located approximately 2,600 feet north of Mines Avenue spanning the San Gabriel River, and Class I and II bike lanes along Dunlap Crossing Road from the San Gabriel River to Norwalk Boulevard. The alignment along Dunlap Crossing Road will connect an existing publicly accessible bike path on the west side of the San Gabriel River to the San Gabriel River Mid trail. The proposed improvements on Mines Avenue include but are not limited to: pavement reconstruction; installation of bioswales, stormwater catch basins and other improvements such as, reconfiguration of parking lanes; upgrading street lights; traffic signal modifications at Rosemead Boulevard and Mines Avenue; signage; striping; utility relocation; and landscaping.



Prepared By:

VCS Environmental

Map Created: April 2019

Data Source: ESRI

Pico Rivera
Regional Bikeway Bridge Project

Figure 1

Project Location Map

Mines Avenue Class IV Bikeway

Mines Avenue is a two-lane undivided roadway that functions as a collector facility from the city's western edge to Passons Boulevard where it continues as a local road. Mines Avenue allows for east-west circulation in the north central portion of the city, and functions as an alternative to Washington Boulevard and Whittier Boulevard. A combination of on-street parallel and diagonal parking is provided along the roadway. The majority land uses within the project area are single family residential land uses that front along Mines Avenue. Other sensitive land uses within the project area include; Smith Park, Pio Pico Woman's Club and the Pico Rivera Senior Center.

The Mines Avenue Class 4 Bikeway would be located along the center median of the roadway and would consist of 2 six-foot wide bike lanes with a 4 to 6-foot landscape bioswale on both sides of the bikeway. The proposed bioswale would treat surface water runoff, increase water quality, and provide aesthetically pleasing landscape corridor. As part of the Construction of the Class 4 Bikeway, the grade of Mines Avenue would be slightly inverted to convey surface water runoff from the street into the proposed bioswale along the center of the roadway.

The Mines Avenue Class I Bikeway would involve 3 primary construction phases; mobilization, roadway demolition, and reconstruction and bikeway construction. The construction activities would occur in 1000-foot segments and would alternate along the northbound and southbound travel lanes to allow for vehicle and pedestrian access.

Mines Avenue Bikeway Bridge

The Mines Avenue Bikeway Bridge would be constructed approximately 800 feet downstream of the Whittier Boulevard Crossing over the San Gabriel River. The western end of the bridge would generally be constructed at the location where the San River Spreading Basins Trail and the San Gabriel River Trail meets. The eastern end of the bridge would tie into the existing San Gabriel River Trail.

The proposed Mines Avenue Bikeway Bridge would have a width of 8 feet and expand approximately 350 feet over the San Gabriel River. The bridge would be a prefabricated structure that would be installed in segments. The construction activities for the bikeway bridge would involve 3 primary construction phases; mobilization, construction of bridge foundations, and installation of bridge.

This work will occur within jurisdictional waters. Work will occur outside of the nesting and flood season.

Dunlap Crossing Road Bikeways

The Dunlap Crossing Road Bikeways improvements involve reconstruction of Dunlap Crossing Road Class 1 Bikeway and Class 2 Bikeway from Norwalk Boulevard to the San Gabriel River Trail. The Dunlap Crossing Road Class 2 Bikeway extends 1000 feet from Norwalk Boulevard before transitioning into a Class I Bikeway. The roadway has a width of 30 feet with one travel lane in each direction. The Dunlap Crossing Class 1 Bikeway is approximately 600 feet in length with a five-foot width with an adjacent dirt shoulder. The majority of land uses long the Dunlap Crossing Class 1 Bikeway and Class 2 Bikeway are residential land uses.

The Dunlap Crossing Road Bikeway improvements would involve 2 primary construction phases; mobilization, and roadway and bikeway demolition and reconstruction. Along Dunlap Crossing Road the construction would alternate along the northbound and southbound travel lanes to allow for vehicle and pedestrian access. The Dunlap Crossing Bikeway would be constructed in one construction phase and would remain closed until it would be completed.

The Project Impact Area is defined as the area of permanent and temporary direct impacts (i.e. construction footprint) and includes all staging and access areas. The Project Impact Area is shown in Figure 2 including all permanent and temporary impacts.

Construction is anticipated to occur in 2020 outside of the nesting bird season (February 1 to August 31) and flood season.

No project alternatives were considered for this project.

Prepared By:

VCS Environmental

Map Created: April 2019

0 1,500 3,000 Feet

Data Source: BING, City of Pico Rivera, BFK

Pico Rivera
Regional Bikeway Bridge Project

Figure 2

Project Impact Area

Chapter 2 – Study Methods

Studies of the biological resources associated within the Project began with a review of relevant available databases, followed by onsite field surveys. A general biological survey and jurisdictional delineation were completed by VCS Environmental biologists Erin Hayes, Wade Caffrey, and Sierra Coleman on March 15, 2019. A focused rare plant survey was conducted by KBI botanist Teresa Salvato on April 23, 2019. The purpose of the field surveys was to assess the existing habitat, onsite sensitive plant communities and jurisdictional waters, to determine whether special status plant and wildlife species occur or have potential to occur within the Project site.

Regulatory Requirements

Clean Water Act

- Provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters.

- Section 404: USACE Jurisdiction over fill materials in essentially all water bodies, including wetlands. All federal agencies are to avoid impacts to wetlands whenever there is a practicable alternative. Section 404 established a permit program administered by USACE regulating the discharge of dredged or fill material into waters of the US (including wetlands).

- Section 401: Requires that an applicant for a federal license or permit that allows activities resulting in a discharge to waters of the U.S., must obtain a state certification that the discharge complies with other provisions of CWA. The RWQCB administer the certification program in California.

- The guidelines allow the discharge of dredged or fill material into the aquatic system only if there is no practicable alternative that would have less adverse impacts.

Due to impacts to Waters of the U.S., a Section 404 permit, and a Section 401 Water Quality Certification will be required for this Project.

Porter-Cologne Water Quality Control Act

- Project activities within Waters of the State are subject to RWQCB jurisdiction. Waste Discharge Requirements (WDR) will be covered by the Section 401 Water Quality Certification, which will be required for this Project.

Migratory Bird Treaty Act

This treaty with Canada, Mexico and Japan makes it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill migratory birds. The law applies to the removal of nests (such as swallow nests on bridges) occupied by migratory birds during the breeding season. California Fish and Game Code (Sec 3500) also prohibits the destruction of any nest, egg, or nestling.)

Section 4150 of the Fish and Game Code

Prohibits incidental or deliberate “take” of non-game mammals, including bats. Potential impacts to bats will be avoided with a pre-construction survey conducted prior to initiation of work.

Executive Order 11990 – Protection of Wetlands

Established a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative. The U. S. Department of Transportation (DOT) promulgated DOT Order 5660.1A in 1978 to comply with this direction. On federally funded projects, impacts on wetlands must be identified. Alternatives that avoid wetlands must be considered. If wetland impacts cannot be avoided, then all practicable measures to minimize harm must be included.

Executive Order 13112 – Invasive Species

> On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the California Invasive Species Council to define the invasive plants that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

Under the E.O., federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless all reasonable measures to minimize risk of harm have been analyzed and considered.

Studies Required

Literature Search

The study began with a review of relevant available literature on the biological resources within the Project Impact Area and surrounding vicinity to identify potential special status plant and animal species that may occur within the Project boundaries. Resources that were used in the initial search include the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants database, and a U.S. Fish and Wildlife Service (USFWS) Species List. These resources are explained in more detail below:

- The CNDDB, a CDFW species account database that inventories status and locations of rare plants and wildlife in California, was used to identify any sensitive plant communities and special status and wildlife that may exist within a two-mile radius of the Project site (CDFW 2019g). CNDDB records are generally used as a starting point when determining what special status species, if any, may occur in a particular area. However, these records may be old, lack data not yet entered, and do not represent all the special status species that could be in that particular area.

- The USFWS Species List was obtained from the USFWS Information for Planning and Conservation website (USFWS 2019d). Information for resources such as migratory birds, species proposed or listed under the Endangered Species Act, inter-jurisdiction fishes, specific marine mammals, and wetlands are found on this USFWS website. The Species List provides a list of species and critical habitat that would need to be considered under a Section 7 consultation, if appropriate. The list provides information regarding species known or have potential to occur in the Project area.

- CNPS Inventory of Rare and Endangered Plants of California was used to search for any special status plant species that may have been recorded within the Project Impact Area and surrounding vicinity. Search criteria included: the Whittier U.S.G.S. Quadrangle (33118811), in Los Angeles County, 0 – 300 feet elevation.

The following sources were reviewed to determine the potential presence or absence of jurisdictional streams/drainages, wetlands, and their location within the watersheds associated with the Project Impact Area, and other features that might contribute to federal or state jurisdictional authority located within watersheds associated with the Project:

- National Wetlands Inventory (NWI) maps (USFWS 2019c). The NWI database indicates potential wetland areas based on changes in vegetation patterns as observed from satellite imagery. This database is used as a preliminary indicator of wetland habitats because the satellite data are not precise;
- USGS National Hydrography Dataset (NHD). Provides the locations of “blue-line” streams as mapped on 7.5-Minute Topographic Map coverage;
- Aerial Imagery (Google Earth©) (Google 2019);
- USGS 7.5-Minute Topographic Maps; and
- Natural Resource Conservation Service (NRCS) Soil Survey.

The literature review provided a baseline inventory of the biological resources potentially occurring within the Project Impact Area, as well as the surrounding area. Although the inventory list of special status plant and wildlife species was not exhaustive of all species that might be of concern for the property, it provided a wide range of species that are representative of the wildland habitats in the area. Species occurrence and distribution information is often based on documented occurrences where opportunistic surveys have taken place; therefore, a lack of records does not necessarily indicate that a give species is absent from the Project site.

A comprehensive list of all potential special status plant and animal species is included in Chapter 3. The USFWS Species List, CNDDB search list, and CNPS search list obtained for this Project are attached as Appendix A. This project is located outside of NOAA Fisheries jurisdiction; therefore a NOAA Fisheries species list is not required and no effects to NOAA Fisheries species are anticipated.

Field Surveys

The Biological Study Area (BSA) includes all areas that could potentially be impacted by the Project as well as extra room to accommodate changes in staging, access, and slight modifications to Project design. The BSA includes an existing bike path, paved roads and adjacent development, and a section of the San Gabriel River. A map of the BSA is shown in Figure 3. The existing bike path was lined with a variety of native and ornamental plant

species. To the west of the bike path is a developed residential area and to the east are spreading grounds used for flood control and water conservation. East of the spreading grounds is the San Gabriel River.

A field survey was conducted on March 15, 2019 by VCS biologists Erin Hayes, Wade Caffrey, and Sierra Coleman to assess and map vegetation communities and jurisdictional waters, and conduct a general reconnaissance level plant and wildlife survey. The purpose of the survey was also to ascertain general site conditions and identify habitat areas that could be suitable for special status plant and wildlife species within the BSA. Adjacent properties that were inaccessible were also evaluated from the BSA utilizing binoculars.

During the field survey, the biologists assessed the existing habitat within the BSA. The biologists paid special attention to those habitat areas that were suitable for special status plant and wildlife species. Aerial photographs and maps were used to assist in the delineation of plant community boundaries. Following the field survey, the plant communities were digitized, and a vegetation map was prepared.

Plant species were identified using plant field and taxonomical guides, such as The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al. 2012). All plant species encountered during the field survey were identified and recorded in field notes. An effort was made to determine presence or absence of potentially suitable habitat for those plants that could not be identified at that time.

A general wildlife survey was conducted on foot and with binoculars within the BSA. The location of the BSA is within the general distributional range of several special status species. The purpose of the general survey was to note those species observed, ascertain general site conditions, and identify habitat areas that could be suitable for special status wildlife species.

All wildlife species encountered visually or audibly during the field survey were identified and recorded in field notes. Biologists also recorded signs of wildlife species including wildlife tracks, burrows, nests, scat, and remains. Binoculars were used to aid in the identification of observed wildlife. Wildlife field guides and photographs were used to assist with identification of wildlife species during the field survey, as necessary.

A wetland delineation within the BSA was conducted by VCS biologists Wade Caffrey and Sierra Coleman on March 15, 2019. Sensitive areas were delineated using a handheld Global Positioning System device (ESRI Arc Collector App). All areas with depressions or drainages were evaluated for the presence of Waters of the United States (U.S.), including jurisdictional wetlands. Each area was inspected according to the USACE delineation guidelines, and streambeds/wetland boundaries of CDFW and RWQCB. Furthermore, prior to the site visit, the delineators reviewed the Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants report (Brady and Vyverberg 2013). All drainages encountered were also examined for connectivity or lack of connectivity to other hydrologic features. Dominant vegetation within the drainages or adjacent to the drainages were identified and recorded. Other references used to determine jurisdictional areas included vegetation and topographic maps of the BSA and a recent aerial photograph. The methodology is further detailed in the Jurisdictional Delineation report attached in Appendix B.

A focused rare plant survey was conducted by KBI botanist Teresa Salvato on April 23, 2019 to determine presence/absence of special status plant species and vegetation

communities. The focused rare plant survey methodology follows the recommended CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, 2018) and is described in further detail in Appendix C.

Personnel and Survey Dates

A vegetation survey and jurisdictional delineation were completed on March 15, 2019 by VCS biologists Wade Caffrey, Erin Hayes, and Sierra Coleman. A focused rare plant survey was completed on April 23, 2019 by KBI botanist Teresa Salvato.

Personnel	Company	Surveys Performed	Years Experience
Wade Caffrey	VCS Environmental	General Biological Survey and Jurisdictional Delineation	9
Sierra Coleman	VCS Environmental	General Biological Survey and Jurisdictional Delineation	1
Erin Hayes	VCS Environmental	General Biological Survey and Jurisdictional Delineation	15
Teresa Salvato	Kidd Biological Inc.	Focused Rare Plant Survey	20+

Agency Coordination and Professional Contacts

No agency coordination has occurred for the Project. Coordination with the U.S. Army Corps of Engineers, RWQCB, and CDFW is expected to occur to obtain appropriate and necessary authorizations including but not limited to a Section 404 permit, Section 401 Water Quality Certification, and CDFW Streambed Alteration Agreement.

Limitations That May Influence Results

Timing and budget factors for this Project allowed for one general biological field survey by VCS biologists and one rare plant field survey by the KBI botanist. The jurisdictional delineation was conducted during the general biological field survey by VCS. The surveys were conducted in spring when many annual plants are in flower and are identifiable. Some plants were in their germination phase during each of the surveys and were not identifiable. Sufficient information was available at the time of the surveys to accurately assess the presence/absence or potential for resources, based on the type of habitat and presence of regular maintenance/disturbance present in the BSA at the particular time of year. A late season plant survey should be performed to address the potential for late-season blooming species, as noted in avoidance/minimization measure BIO-5. Assessments of presence/absence and potential for occurrence were made based on presence of suitable habitat records or occurrences within the area, known distribution

and elevation range, and habitat utilization from the relevant literature. The jurisdictional delineation followed standard USACE, RWQCB, and CDFW guidelines. The rare plant survey followed the recommended CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, 2018).

Chapter 3 – Results: Environmental Setting

The Project impacts occur along developed roadways to the west and east of the San Gabriel River and within the San Gabriel River where the bridge structure will be built. The BSA is predominantly developed but also includes some natural areas, which appear to be heavily managed. Jurisdictional waters of the U.S. and State found within the Project Impact Area are located within the San Gabriel River. Topography within the BSA is relatively flat overall. The physical and biological conditions of the site are described in further detail below.

Description of the Existing Biological and Physical Conditions

STUDY AREA

The Biological Study Area (BSA) includes the areas of land and water that may be directly, indirectly, permanently, or temporarily affected by construction or construction-related activities. The Project Impact Area is the area of direct impacts associated with Project construction. The Project Impact Area includes already developed areas (roadways) as well as the San Gabriel River, and is mostly surrounded by development. The BSA includes additional area within the San Gabriel River to accommodate potential changes in project design, as well as access pathways along existing paved bike trails and potential staging areas adjacent to the bike trails. The BSA and Project Impact Area are identified on Figure 3. Additional maps depicting information within the BSA and Project Impact Area site are included in Appendix D. The BSA includes primarily publicly owned land including City streets, regional bike trails, the San Gabriel River, and the San Gabriel Coastal spreading grounds.

Prepared By:

VCS Environmental

Map Created: April 2019

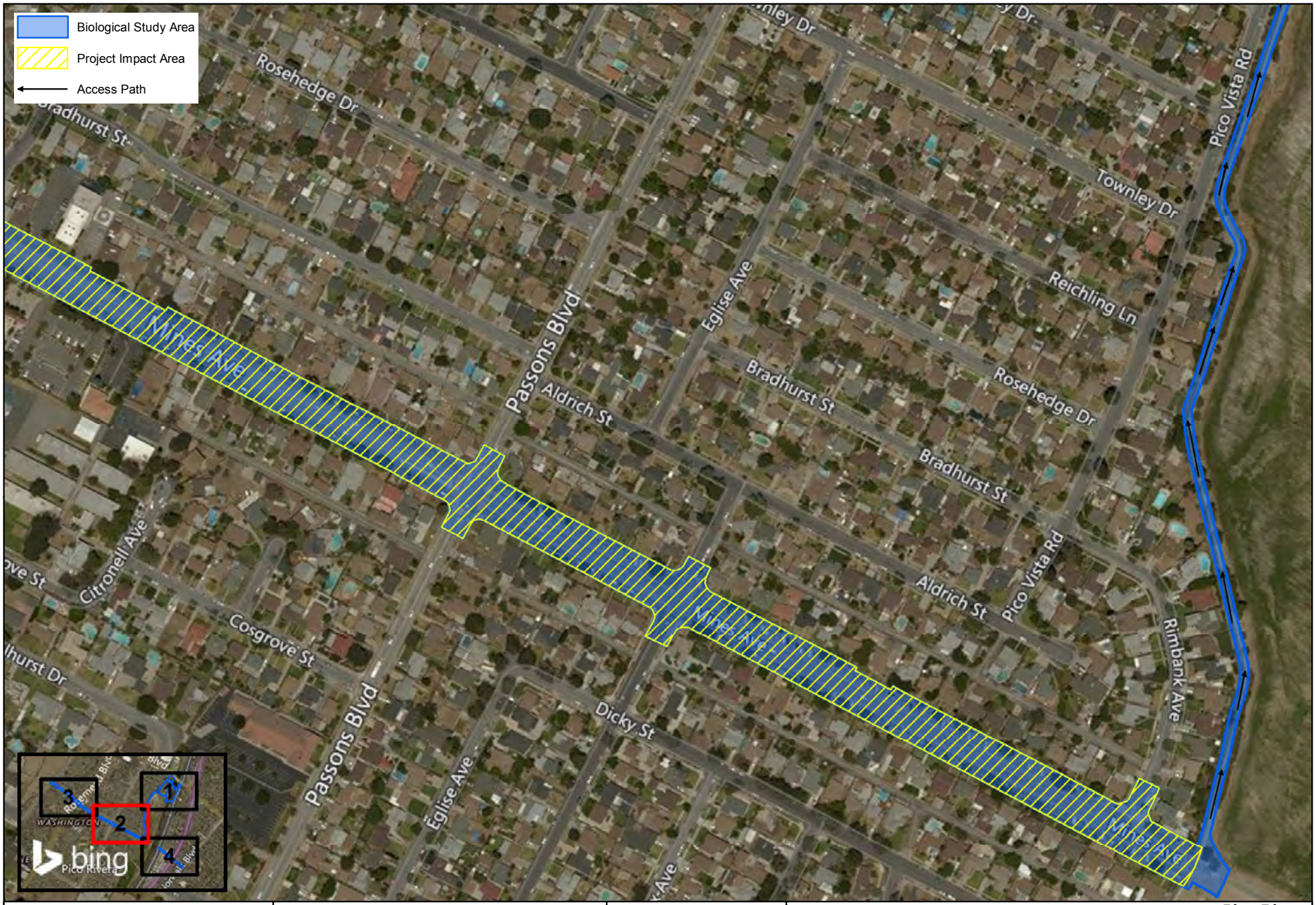
0 300 600 Feet

Data Source: BING, Kidd
City of Pico Rivera, BFK, VCS

Figure 3

Pico Rivera
Regional Bikeway Bridge Project

Biological Study Area



Prepared By:

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Map Created: April 2019

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Pico Rivera
Regional Bikeway Bridge Project

Figure 3

Biological Study Area

Prepared By:

VCS Environmental

Map Created: April 2019

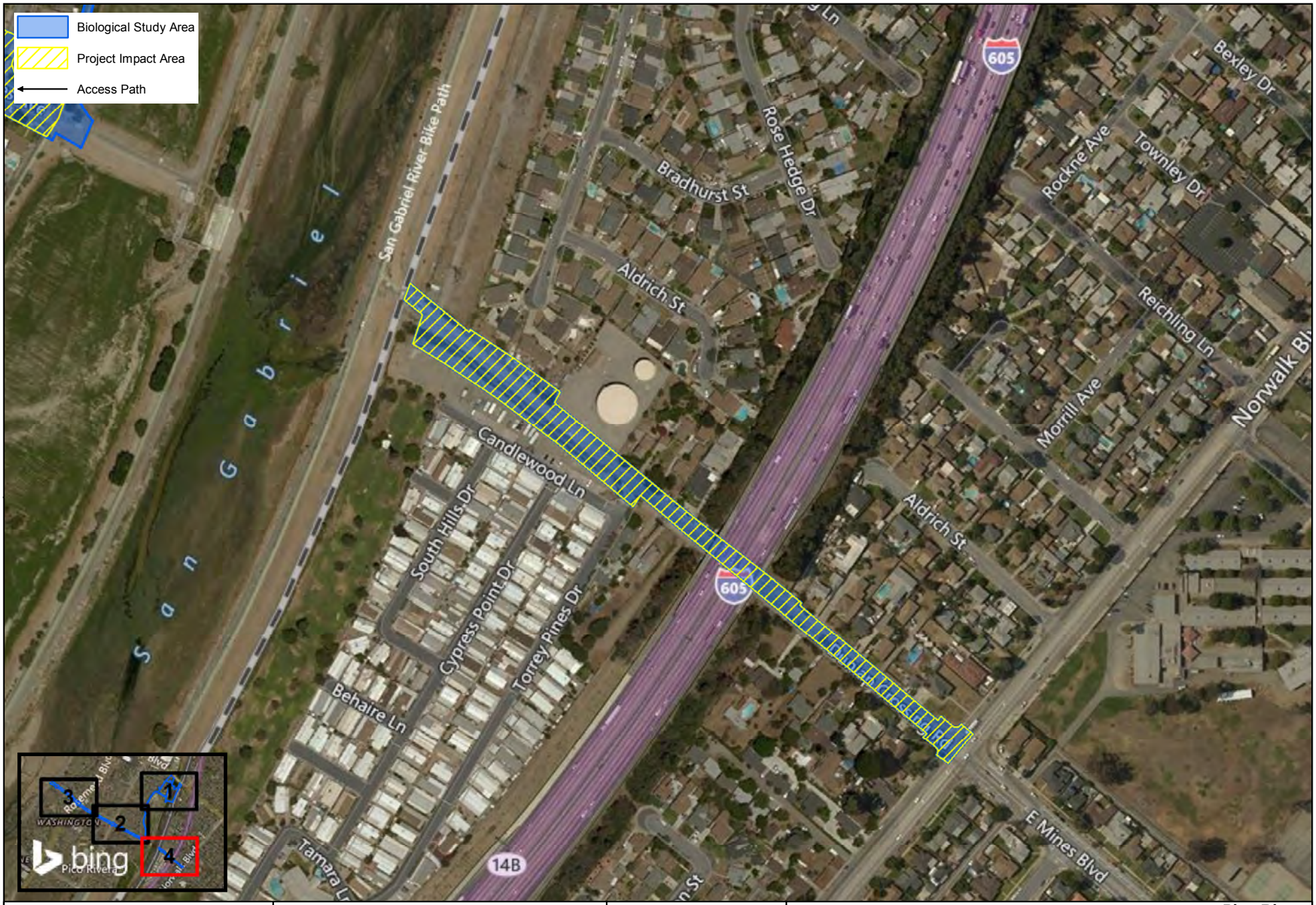
0 300 600 Feet

Data Source: BING, Kidd
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 3

Biological Study Area



Prepared By:

VCS Environmental

Map Created: April 2019

0 300 600 Feet

Data Source: BING, Kidd
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 3

Biological Study Area

PHYSICAL CONDITIONS

The BSA is located within the San Gabriel River Watershed. Project impacts will occur west of, within, and east of the San Gabriel River. While a majority of the Project will occur in the developed areas surrounding the San Gabriel River, a bridge will be constructed over the river course. The San Gabriel River banks are constructed and reinforced with riprap. Water flow in the river is managed by the diversion of high flows into the adjacent spreading grounds ponds via a concrete dam structure across the river bed immediately upstream of the future bridge location. The Project site topography is relatively flat overall with elevations ranging from 146 feet to 160 feet. Topographical relief is primarily found at the San Gabriel River edges with the constructed and protected riprap banks sloping down to the natural river bottom, in addition to the slopes of the spreading ground ponds from the pond bottoms up to the developed/landscaped areas surrounding the ponds. A topographic map is included in Appendix D. Major tributaries to the San Gabriel River are Walnut Creek, San Jose Creek, and Coyote Creek. The average annual rainfall of Pico Rivera, CA is approximately 17 inches.

The United States Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey lists four soil types for the BSA. The soil types within the BSA are listed below.

Urban land-Hueneme, drained-San Emigdio complex [1000] – 0 to 2% slopes

This soil complex is usually found on alluvial fans at elevations from 10 to 300 feet. It is very slightly saline to slightly saline and somewhat poorly drained. Its distribution profile ranges from sandy loam to loamy sand.

Urban land-Biscailuz-Hueneme, drained complex [1005] - 0 to 2 percent slopes

This soil complex is usually found on alluvial fans at elevations from 0 to 190 feet. It is nonsaline to very slightly saline and somewhat poorly drained. Its distribution profile ranges from loam to very fine sandy loam.

Pits and Quarries [1180]

This soil complex is usually found on alluvial fans at elevations 10 – 1950 feet.

Xeropsamments, frequently flooded [1264] - 0 to 2% slopes

This soil complex is usually found in channels and rivers at elevations from 100 to 460 feet. It is susceptible to frequent flooding and is somewhat excessively drained. Its distribution profile is stratified sand.

The NRCS lists two of the above as hydric soils (USDA 2019), Pits and Quarries [1180] and Xeropsamments [1264]. A soils map is included in Appendix D.

Within the Project Impact Area, jurisdictional waters of the U.S. and State are located only within the San Gabriel River as described in further detail below and in the jurisdictional delineation report attached as Appendix B.

The Project site overlies the Puente Basin within the San Gabriel Valley Groundwater Basin (San Gabriel Basin). The San Gabriel Basin is located in eastern Los Angeles County, where it underlies most of the San Gabriel Valley and a portion of the upper Santa Ana Valley. Alluvial fan deposits, formed by outflow from the San Gabriel Mountains, comprise the basin. Groundwater levels generally follow topographic slope across the San Gabriel Basin; groundwater flows from the edges to the center of the basin, then southwestward to exit through a topographic low.

BIOLOGICAL CONDITIONS IN THE BIOLOGICAL STUDY AREA

As noted above, the BSA consists largely of developed land. The developed portions of the BSA include vegetation in the form of landscaping and incidental non-native, weedy patches. The San Gabriel River is the primary area within the BSA featuring more natural exposed soils and vegetation/habitat, although the river itself appears to be heavily managed and influenced by the human-constructed banks and regulation of water flow, as noted above in the physical conditions. Vegetation within the San Gabriel River appears to be heavily managed and maintained, based on the lack of mature established habitat and dominance of non-native species.

Land Covers and Vegetation Communities in the Project Impact Area

The vegetation communities and habitat conditions were inspected to confirm presence and habitat quality of the vegetation found within the BSA and the Project Impact Area. Where appropriate, descriptions of vegetation communities from the Manual of California Vegetation (Sawyer 2008) were utilized. Any deviations from standard vegetation classifications were made on best professional judgment when areas did not fit into a specific habitat description provided by the Manual.

Plant communities were mapped using field observations and utilizing aerial imagery in Google Earth. Vegetation/land cover acreages for each vegetation community/land cover type on-site are listed below in Table 1 for the Project Impact Area. Please refer to Appendix D to view the vegetation map of the BSA. Representative photographs of the BSA are included as Appendix E. Dominant native and invasive species in each of the vegetation communities/land covers is detailed in the descriptions below. A list of the plant species identified in the BSA during the general biological survey is included as Appendix F.

Table 1: Vegetation Communities/Land Cover

Vegetation Communities/Land Cover	Project Impact Area Acreage
Disturbed/Developed	18.43
Ornamental	N/A
California Native Landscaping	N/A
Black Willow Thickets	0.10
Mulefat Thickets	0.02
California Bulrush Marsh	0.14
Smartweed Patches	N/A
Ragweed Patches	0.13
Sedge Patches	0.20
Streambed	1.37

Vegetation Communities/Land Cover	Project Impact Area Acreage
English Plantain Patches	N/A
Upland Mustards	0.15
Annual Barley Grassland	0.09
Open Water	0.002
Total	**22.612**

Disturbed/Developed

A total of 18.43 acres of the land within the Project Impact Area is considered disturbed/developed. Disturbed/developed land cover includes areas of bare ground, paved roads, concrete spillways, and any other built facilities. Additionally, the land cover includes incidental landscaping (trees, shrubs, and herbaceous cover) that occurs amongst the disturbed or developed areas of land. Some of the landscaping is native California species as noted below. This land cover is found outside of the San Gabriel River.

Ornamental

Areas within the BSA are classified as ornamental vegetation, however this land cover type does not occur within the Project Impact Area. The ornamental vegetation consists of large landscaped swaths of vegetation include primarily non-native species such as silk floss tree (*Ceiba speciosa*) and carob tree (*Ceratonia siliqua*). Ornamental landscaping is also incidentally found within the disturbed/developed land cover as well. These areas are found in the developed area surrounding the San Gabriel River.

California Native Landscaping

Areas within the BSA are classified as California native landscaping, however this land cover type does not occur within the Project Impact Area. The California native landscaping is similar to the ornamental landscaping with the primary difference being the composition of species. This vegetation type, while landscaping, is comprised of native California species including California sagebrush (*Artemisia californica*), California sycamore (*Platanus racemosa*), toyon (*Heteromeles arbutifolia*), white sage (*Salvia apiana*), and mulefat (*Baccharis salicifolia*). California native landscaping is also incidentally found within the disturbed/developed land cover as well primarily along the bike path west of the spreading grounds. This vegetation type is found in the developed area surrounding the San Gabriel River.

Black Willow Thickets

A total of 0.10 acre of black willow thickets occurs within the Project Impact Area and exclusively within the San Gabriel River. The black willow thicket habitat is classified by the presence of black willow (*Salix goodingii*) trees. In the Project Impact Area these trees are found in localized patches and are not widespread. Each patch consists or 1 or more mature black willow trees. Understory varies and includes primarily herbaceous species such as non-native wild radish (*Raphanus sativus*), foxtail barley (*Hordeum murinum*), and other herbaceous species found through the streambed area.

Mulefat Thickets

A total of 0.02 acre of mulefat thicket is found within the Project Impact Area and exclusively within the San Gabriel River. Mulefat thickets are characterized by the presence and dominance of mulefat shrubs. The mapped mulefat thickets consist of patches of one or more mulefat shrubs. Understory is similar to the surrounding herbaceous habitats including foxtail barley, weakleaf bur ragweed (*Ambrosia confertiflora*), and wild radish.

California Bulrush Marsh

A total of 0.14 acre of California bulrush marsh is found within the Project Impact Area and exclusively within the San Gabriel River. The California bulrush marsh is characterized by the dominance of the species California bulrush (*Shoenoplectus californicus*). This is a wetland habitat that requires plentiful water and consists of typically dense tall herbaceous rushes. Few other species were noted within these habitats and if present comprised a very small portion of the vegetation. These patches were typically located in low points of the streambed especially downstream of drainage outlets.

Smartweed Patches

Areas within the BSA are classified as smartweed patches, however this vegetation type does not occur within the Project Impact Area. These patches are located within the San Gabriel Coastal spreading grounds. This vegetation community is characterized by a dominance or co-dominance of swamp smartweed (*Persicaria hydropiperoides*) and found in disturbed vernally wet ponds. Other wetland species found in these patches includes tall sedge (*Cyperus eragrostis*).

Ragweed Patch

A total of 0.13 acre of ragweed patch is found within the Project Impact Area exclusively within the San Gabriel River. The ragweed patch is limited to one area along the eastern portion of the San Gabriel River streambed. This vegetation community is characterized by the presence and dominance of herbaceous native weakleaf bur ragweed. Additional species with minor abundance include foxtail barley and annual stinging nettle.

Sedge Patches

A total of 0.20 acre of sedge patches is found within the Project Impact Area and exclusively within the San Gabriel River. The sedge patch is located linearly near the toe of slope along the western bank of the San Gabriel River. The vegetation community appears to be confined to availability of water flowing from the outlet drainages feeding into the San Gabriel River. The vegetation community is characterized by the dominance of tall sedge and minor abundance of other herbaceous species common in the Project area.

Streambed

A total of 1.37 acres of streambed habitat is found within the Project Impact Area and exclusively within the San Gabriel River. At the time of the general biological survey the streambed area had many very small plants just beginning to germinate which could not be identified. The species appeared to be water-dependent including possibly native

herbaceous species tall sedge and swamp smartweed. The streambed habitat area also consisted of fresh splays of sand likely transported through the Project area during recent heavy rain storms of the winter 2018/2019 season.

English Plantain Patches

Areas within the BSA are classified as English plantain patches, however this land cover type does not occur within the Project Impact Area. English plantain patches are herbaceous vegetation communities characterized by the dominance of non-native English plantain (*Plantago lanceolata*) and occur exclusively within the San Gabriel River. Other non-native herbaceous species may occur in lesser densities such as foxtail barley, wild radish, red-stem filaree (*Erodium cicutarium*), annual stinging nettle (*Urtica urens*), Bermuda grass (*Cynodon dactylon*), and shortpod mustard (*Hirschfeldia incana*).

Upland Mustards

A total of 0.15 acre of upland mustards occurs within the Project Impact Area. The upland mustards habitat type is characterized by the dominance of non-native shortpod mustard and wild radish. Other herbaceous species may occur in lesser densities such as foxtail barley.

Annual Barley Grassland

A total of 0.09 acre of annual barley grassland is found within the Project Impact Area. This habitat is a non-native dominated community found along the eastern bank of the San Gabriel River. This vegetation community is characterized by the presence of herbaceous non-native foxtail barley. Additional species with minor abundance include ripgut brome (*Bromus diandrus*) and mustard.

Open Water

A total of 0.002 acre of open water is found within the Project Impact Area. This land cover type consisted of open water and lacked vegetation at the time of the general biological survey. This area will likely constantly change with river flows.

Wildlife in the Biological Study Area

All wildlife species or signs thereof observed during the general biological survey on March 15, 2019 were recorded. A list of the species observed during the biological survey is found below:

Scientific Name	**Common Name**
Birds	
Agelaius phoeniceus	red- winged blackbird
Anas platyrhynchos	common mallard
Ardea herodias	great blue heron
Buteo jamaicensis	red-tailed hawk
Cathartes aura	turkey vulture

Scientific Name	Common Name
Charadrius vociferous	killdeer
Corvus brachyrhynchos	American crow
Egretta thula	snowy egret
Hirundo rustica	barn swallow
Lonchura punctulate	nutmeg mannikin
Fulica americana	American coot
Mimus polyglottos	northern mockingbird
Psaltriparus minimus	bushtit
Quiscalus quiscula	common grackle
Sayornis nigricans	black phoebe
Sayornis saya	Say's phoebe
Setophaga coronate	yellow-rumped warbler
Spatula cyanoptera	cinnamon Teal
Spinus psaltria	lesser goldfinch
Zonotrichia leucophrys	white-crowned sparrow
Mammals	
Canis lupus familiaris	domestic dog
Procyon lotor	raccoon
Insects	
Papilionidae sp.	swallowtail butterfly
Vanessa cardui	painted lady

Invasive Species in the Project Impact Area

A number of invasive plant species were observed within the Project Impact Area including the following species: poison hemlock (*Conium maculatum*), Mexican fan palm (*Washingtonia robusta*), shortpod mustard, wild radish, castor bean (*Ricinus communis*), red-stem filaree, English plantain, Bermuda grass, and foxtail barley.

Aquatic Resources and Jurisdictional Waters in the Project Impact Area

VCS biologists completed a delineation of jurisdictional waters within the Project Impact Area. Both Waters of the United States and Waters of the State were present within the Project Impact Area in the San Gabriel River. Details of the jurisdictional waters found within the Project Impact Area are found below and in the attached Jurisdictional Delineation Report (Appendix B). A jurisdictional delineation map is attached in Appendix D.

The jurisdictional waters within the San Gabriel River can generally be classified into 3 overall categories for USACE and RWQCB: wetland, emergent wetland, and non-wetland, and 3 overall categories for CDFW: riparian, emergent riparian, and streambed. The upland areas within the San Gabriel River have mostly non-native plant species such as short pod mustard, wild radish, red-stemmed filaree, sow thistle (*Sonchus oleraceus*), prickly lettuce (*Lactuca serriola*), toothed dock (*Rumex dentatus*), and annual barley grassland. Vegetation within the lower limits of the San Gabriel River appears to be disturbed with routine annual maintenance; species present include swamp smartweed, Bermuda grass, weakleaf bur ragweed, common sunflower (*Helianthus annuus*), English plantain, California bulrush, mulefat, and black willow and depicted on the vegetation map in Appendix D.

The USACE, CDFW, and RWQCB impacts and jurisdictional acreages are detailed in Tables 2-4 below and depicted on the jurisdictional delineation map (Appendix D).

Table 2: Approximate Impacts to USACE Jurisdictional Waters

Impact Type	Impact Acreage
Total Permanent – Emergent Wetland	0.001*
Total Temporary	2.16
Wetland	0.57
Emergent Wetland	1.38
Non-wetland	0.21

*0.001 acre = 57.0 square feet

Table 3: Approximate Impacts to CDFW Jurisdictional Waters

Impact Type	Impact Acreage
Total Permanent –Emergent Riparian	0.001*
Total Temporary	2.72
Riparian	0.58
Emergent Riparian	1.38
Streambed	0.76

*0.001 acre = 57.0 square feet

Table 4: Approximate Impacts to RWQCB Jurisdictional Waters

Impact Type	Impact Acreage
Total Permanent –Emergent Wetland	0.001*
Total Temporary	2.72
Wetland	0.58
Emergent Wetland	1.38
Non-Wetland	0.76

*0.001 acre = 57.0 square feet

Regional Connectivity/Wildlife Movement/Nesting/Maternity Roost

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Corridors effectively act as links between different populations of a species. An increase in a population's genetic variability is generally associated with an increase in a population's health.

Corridors mitigate the effects of habitat fragmentation by:

- Allowing wildlife to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity;

- Providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and

- Serving as travel routes for individual wildlife species as they move within their home ranges in search of food, water, mates, and other needs (Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories:

- Dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions);

- Seasonal migration; and

- Movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover).

<u>Wildlife Movement within and near the Project Impact Area</u>

The BSA is located within the home range of many wildlife species. The BSA is located near and within the San Gabriel River and San Gabriel River Coastal spreading grounds. Additionally, an upland recreational bike trail flanked with patches of California native landscaping connects upstream and downstream areas along and adjacent to the River. Development is located on either side of the San Gabriel River and spreading grounds in the Project vicinity, as well as along much of the San Gabriel River from the Santa Fe Dam in Irwindale to the San Gabriel's River outlet into the Pacific Ocean. While the River and spreading grounds provide a direct link from upstream to downstream habitat, there is limited natural habitat along the river's course from the Santa Fe Dam to the Pacific Ocean. Much of the San Gabriel River is confined and concrete-lined, or appears to be heavily managed without obvious mature established habitat. Therefore, while there is the opportunity for upstream and downstream connection to function in local wildlife movement, the intense management (apparent vegetation maintenance) is a limiting factor in the San Gabriel River's ability (including the BSA) to provide high quality, effective wildlife movement habitat. With a lack of cover and food sources, the value of this River is lessened. It is for these same reasons that it is unlikely the River functions in regional wildlife movement. The BSA is not within the range of special status native fish including

arroyo chub, Santa Ana sucker, or Santa Ana speckled dace, and the existing condition of the river is not conducive to fish passage. There is a dam structure within the BSA that functions to divert high flows to the San Gabriel coastal spreading ground, and the San Gabriel River becomes a concrete-lined facility within a few miles downstream of the site. Fish passage is not a concern within the Project area.

Bird Nesting and Bat Maternity Roost Sites

The Project Impact Area contains features like trees and shrubs and other habitat that could support nesting birds and/or roosting bats, as common to any location containing such features. While a focused survey for bird nesting and bat roosting was not conducted at the time of the general biological survey, no active bird nests or bat maternity roosts were incidentally observed during the general biological surveys.

Regional Species and Habitats and Natural Communities of Concern

From the CNDDB research, the CNPS inventory, USFWS species list, and general knowledge of the area, an inventory of special status plant and wildlife species were identified as having potential to occur within the Project Impact Area and project vicinity. The inventory is listed below. Those species with suitable habitat present are highlighted in the table and analyzed further in the following section.

Table 5: Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area.

Common Name	***Scientific Name***	***Status***	***General Habitat Description***	***Habitat Present/ Absent***	***Rational / Potential for Occurrence within the Project Impact Area***
PLANTS					
intermediate mariposa lily	*Calochortus weedii* var. *intermedius*	CRPR 1B.2	Rocky, calcareous Chaparral, Coastal scrub, Valley/ foothill grassland Elevation: 105-855 meters Blooming Period: May – Jul	HP	Is tolerant of many habitat types
Catalina mariposa lily	*Calochortus catalinae*	CRPR: 4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland Elevation: 15–700 meters Blooming Period: Mar – June	A	This coastal species is not known to occur inland.
Plummer's mariposa lily	*Calochortus plummerae*	FT CRPR: 4.2	Granitic, rocky alluvial habitats with Chaparral, Valley and foothill grassland Elevation: 100–1700 meters Blooming Period: May - Jul	A	No suitable soils, outside elevation
lucky morning-glory	*Calystegia felix*	CRPR: 1B.1	Meadows and seeps (sometimes alkaline), Riparian scrub (alluvial) Elevation: 30-215 meters Blooming Period: Mar-Sept	HP	Marginal habitat onsite; late season survey recommended
Lewis's evening primrose	*Camissoniopsis lewisii*	CRPR: 3	Dune, coastal. Coastal strand, foothill woodland, coastal sage scrub, valley grassland. Elevation: 0-300 meters Blooming Period: Mar - May	P	Observed in two locations near the bike trail. Locations are outside of the direct Project Impact Area.
Southern tarplant	*Centromadia parryi ssp. australis*	CRPR: 1B.1	Marshes and swamps (margins), Valley and foothill grassland	HP	Reasonable potential in less disturbed parts of BSA

Common Name	***Scientific Name***	***Status***	***General Habitat Description***	***Habitat Present/ Absent***	***Rational / Potential for Occurrence within the Project Impact Area***
			(vernally mesic), Vernal pools Elevation: 0-480 meters Blooming Period: May - Nov		
salt marsh bird's-beak	*Chloropyron maritimum* ssp. *maritimum*	FE, SE CRPR: 1B.2	Coastal dunes, Marshes and swamps (coastal salt) Elevation: 0-30 meters Blooming Period: May – Oct.	A	Requires saltwater marsh habitat.
small-flowered morning glory	*Convolvulus simulans*	CRPR: 4.2	Open chaparral, Coastal scrub, Valley/ foothill grassland within clay, serpentinite seeps Elevation: 30-740 meters Blooming Period: Mar – Jul	HP	Reasonable potential in less disturbed parts of BSA
Peruvian dodder	*Cuscuta obtusiflora* var. *glandulosa*	CRPR: 2B.2	Freshwater marshes and swamps Elevation: 15-280 meters Blooming Period: Jul – Oct	HP	Has potential. Needs surveys later in season to identify
many-stemmed dudleya	*Dudleya multicaulis*	CRPR: 1B.2, BLMS, FSS	Many-stemmed dudleya is often associated with clay soils in barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands on clay soils. Elevation: 15-790 meters Blooming Period: Apr-Jun	A	Lack of clay soil onsite and negative survey results
San Diego marsh elder	*Iva hayesiana*	CRPR: 2B.2	Occurs usually in wetlands, occasionally in non-wetlands. Playas. Alkali sink, wetland-riparian. Elevetation:10-500 meters Blooming Period: Apr – Oct.	P	Observed on the berm of the spreading grounds and appears to have been possibly planted. Located outside of the Project Impact Area.
mesa horkelia	*Horkelia cuneata var. puberula*	CRPC: 1B.2	Sandy or gravelly sites in maritime Chaparral, Cismontane woodland, Coastal scrub Elevation: 70-810 meters Blooming Period: Feb – Jul	A	Site is below elevational requirements for this species

Common Name	***Scientific Name***	***Status***	***General Habitat Description***	***Habitat Present/ Absent***	***Rational / Potential for Occurrence within the Project Impact Area***
Southern California black walnut	*Juglans californica*	CRPR: 4.2	Alluvial substrates, chaparral, cismontane woodland, coastal scrub, riparian woodland Elevation: 50 – 900 meters Blooming Period: Mar-Aug	A	Alluvial substrates present, but lacks other habitat characteristics and negative survey results
Coulter's goldfields	*Lasthenia glabrata ssp. coulteri*	CRPR: 1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools. Associated with low-lying alkali habitats along the coast and in inland valleys. Elevation: 1-1220 meters Blooming Period: Feb-June	A	Lacking suitable habitat onsite and negative survey results
Prostrate vernal pool navarretia	*Navarretia prostrata*	CRPR: 1B.1	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools Elevation: 3-1210 meters Blooming Period: Apr-Jul	A	Negative survey results
California Orcutt grass	*Orcuttia californica*	FE, SE CRPR: 1B.1	Vernal Pools Elevation: 15-660 meters Blooming Period: Apr – Aug	A	No suitable habitat or soils to support this species.
south coast branching phacelia	*Phacelia ramosissima var. austrolitoralis*	CRPR: 3.2	sandy, sometimes rocky areas in Chaparral, Coastal dunes, Coastal scrub, coastal Marshes and swamps Elevation: 5-300 meters Blooming Period: Mar - Aug	A	No phacelias observed
Brand's star phacelia	*Phacelia stellaris*	CRPR: 1B.1	Coastal dunes, Coastal scrub Elevation: 1-400 meters Blooming Period: Mar – Jun	A	No sandy bars where this species would occur
Engelmann oak	*Quercus engelmannii*	CRPR: 4.2	Chaparral, Cismontane & Riparian woodland, Valley/foothill grassland Elevation:50-1300 meters Blooming Period: N/A	A	Not observed
Parish's gooseberry	*Ribes divaricatum var. parishii*	CRPR: 1A	Riparian woodland Elevation 65-300 meters Blooming Period: Feb-Apr	A	No riparian woodland and negative survey results
southern mountains skullcap	*Scutellaria bolanderi ssp. austromontana*	CRPR: 1B.2	mesic areas in Chaparral, Cismontane woodland, Lower coniferous forest	A	No suitable habitat or soils to support this species.

Common Name	***Scientific Name***	***Status***	***General Habitat Description***	***Habitat Present/ Absent***	***Rational / Potential for Occurrence within the Project Impact Area***
			Elevation: 425-2000 meters Blooming Period: Jun – Aug		
salt spring checkerbloom	*Sidalcea neomexicana*	CRPR: 2B.2	Alkaline, mesic sites in Chaparral, Coastal scrub, Lower coniferous forest, Mojavean desert scrub, Playas Elevation: 15-1530 meters Blooming Period: Mar – Jun	A	Not observed. Conspicuous species would have been detected.
estuary seablite	*Suaeda esteroa*	CRPR: 1B.2	Marshes and swamps (coastal salt) Elevation: 0-5 meters Blooming Period: May – Oct	A	No habitat on site
San Bernardino aster	*Symphyotrichum defoliatum*	CRPR: 1B.2	Near ditches, streams, meadows, seeps, marshes & vernally mesic Valley/ foothill grassland & other habitats Elevation: 2-2040 meters Blooming Period: Jul – Nov	HP	Has marginal potential. Needs late season survey in order to identify.
ANIMALS					
burrowing owl	*Athene cunicularia*	SSC, BCC, BLMS	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	HP	Suitably sized burrows present on and adjacent to San Gabriel River banks. Low to moderate potential to occur.
western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, SE, BCC, BLMS, FSS	Found in riparian habitats; densely foliaged, deciduous trees and shrubs, especially willows. Woodlands, thickets, orchards, streamside grove.	A	Lack of suitable habitat
coastal California gnatcatcher	*Polioptila californica californica*	FT, SSC	Coastal sage scrub, generally dominated by California sagebrush, buckwheat, salvia, and prickly-pear cactus	A	Typical California gnatcatcher habitat vegetation species are present in small patches in California native landscaping. Habitat not

Common Name	***Scientific Name***	***Status***	***General Habitat Description***	***Habitat Present/ Absent***	***Rational / Potential for Occurrence within the Project Impact Area***
					considered substantial enough to support California gnatcatcher, on-going management, and there is no suitable habitat in the surrounding area.
bank swallow	*Riparia riparia*	ST, BLMS	Found primarily in riparian and other lowland habitats in California west of the deserts during the spring-fall period. In summer, restricted to riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with fine-textured or sandy soils.	A	Site generally lacks suitable habitat. Also, the species is considered extirpated within this area and the last reported CNDDB sighting was in 1894.
Least Bell's vireo	*Vireo bellii pusillus*	FE, SE	Summer resident of Southern California in low riparian, in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, or mesquite.	A	Black willow and mulefat thickets are not substantial enough and lack general characteristics that are typical of least Bell's vireo habitat (on-going vegetation management). Habitat onsite is not considered suitable for occupation by species.
coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage – chaparral, woodland, and riparian areas.	HP	Marginal habitat present. Unlikely to occur within San Gabriel River area because of routine site maintenance. Potential to occur in adjacent vegetated areas.
coast horned lizard	*Phrynosoma blainvillii*	SSC, BLMS	Chaparral, Cismontane woodland, Coastal bluff scrub Coastal scrub, Desert wash, Pinon & juniper woodlands Riparian scrub, Riparian woodland, Valley & foothill grassland	A	Marginal habitat present. Unlikely to occur within San Gabriel River area because of routine site maintenance. Unlikely to occur in adjacent areas due to compact soils.

Common Name	*Scientific Name*	*Status*	*General Habitat Description*	*Habitat Present/ Absent*	*Rational / Potential for Occurrence within the Project Impact Area*

Key

Absent [A] – no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present. The species may be present. Present [P] - the species is present. Critical Habitat [CH] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present.

Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); State Watch List (WL); USFWS Bird of Conservation Concern (BCC); US Forest Service Sensitive (FSS); US Bureau of Land Management Sensitive (BLMS); Western Bat Working Group Priorities (High = H, Medium = M, Low = L, Medium-High = MH, Low-Medium = LM); California Native Plant Society California Rare Plant Rank (CRPR 1A, 1B, 2, 3, 4; Threat Ranks X.1, X.2)

Chapter 4 – Results: Biological Resources, Discussion of Impacts and Mitigation

Habitats and Natural Communities of Special Concern

Sensitive plant communities (sensitive habitats) as defined below, are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects. Sensitive habitats are often threatened with local extirpation and are therefore considered as valuable biological resources. Plant communities are considered "sensitive" by the California Native Plant Society (CNPS) and CDFW if they meet any of the following criteria listed below.

- The habitat is recognized and considered sensitive by CDFW, USFWS, and/or special interest groups such as CNPS.
- The habitat is under the jurisdiction of the USACE pursuant to Section 404 of the CWA.
- The habitat is under the jurisdiction of the CDFW pursuant to Sections 1600 through 1612 of the California Fish and Game Code.
- The habitat is known or believed to be of high priority for inventory in the CNDDB.
- The habitat is considered regionally rare.
- The habitat has undergone a large-scale reduction due to increased encroachment and development.
- The habitat supports special status plant and/or wildlife species (defined below).
- The habitat functions as an important corridor for wildlife movement.

Sensitive habitats are not afforded legal protection unless they support protected species, except for wetland habitats, which cannot be filled without authorization from the appropriate regulatory agencies. The most current version of CDFW's List of California Terrestrial Natural Communities indicates which natural communities are sensitive given the current state of the California classification (CDFW 2019a).

Sensitive habitats identified in the Project Impact Area include those within jurisdictional waters of the U.S and/or State. As described in Chapter 3, detailed in Appendix B, and outlined in Table 6 below, permanent impacts to jurisdictional waters occur within emergent wetland/emergent riparian habitat while the temporary impacts occur within wetland/riparian and non-wetland/streambed habitat.

Table 6: Vegetation Present within Jurisdictional Impact Areas of the San Gabriel River

Impact Type	Wetland	Dominant Vegetation*	Latitude (centerpoint)	Longitude (centerpoint)
Permanent and Temporary	Emergent Wetland/Emergent Riparian	Bermuda grass (*Cynodon dactylon*) [FACU], common sunflower (*Helianthus annuus*) [FAC], swamp smartweed (*Persicaria hydropiperoides*) [OBL], weakleaf bur ragweed (*Ambrosia confertiflora*) [NI], rough cocklebur (*Xanthium strumarium*) [FAC]	33.992984	-118.073483
Temporary	Wetland/Riparian	Bulrush (*Shoenoplectus californicus*) [OBL], swamp smartweed, weakleaf bur ragweed, black willow (*Salix gooddingii*) [FACW], mulefat (*Baccharis salicifolia*) [FAC]	33.993110 33.992746	-118.073779 -118.073109
Temporary	Non-wetland/streambed	Wild radish (*Raphanus sativus*), Bermuda grass, disturbed/developed	33.993250 33.992553	-118.073795 -118.073196

DISCUSSION OF NATURAL COMMUNITIES WITHIN JURISDICTIONAL WATERS

All of the natural communities that occur within the jurisdiction of the USACE, RWQCB, and CDFW are considered sensitive communities and habitat.

Survey Results

The jurisdictional delineation classified 3 overall classes of habitat type that fall within the jurisdiction of the USACE and RWQCB: wetland, emergent wetland and non-wetland, and 3 overall classes of habitat type that fall within the jurisdiction of CDFW: riparian, emergent riparian, and streambed. The following vegetation communities previously described in Chapter 3 occur within these jurisdictional areas: black willow thicket, mulefat thicket, California bulrush marsh, sedge patches, ragweed patches, upland mustards, and annual barley grassland. Additional non-vegetated land cover types within the impacted jurisdictional waters include open water, streambed, and disturbed/developed.

Project Impacts

A total of 57.0 square feet of emergent wetlands in the San Gabriel river will be permanently impacted for the installation of two bridge piers. Temporary impacts to Waters of the U.S. will total 2.15 acres and temporary impacts to Waters of the State total 2.72 acres. Temporary impacts to USACE, CDFW, RWQCB jurisdiction within the Project Impact Area will be caused by:

1. A construction impact zone defined as 50 feet upstream and downstream of the proposed bridge estimated at approximately 0.77 acres; and
2. Equipment access to the construction zone estimated at approximately 20 feet in width but the actual path may vary depending on the access point(s) and vegetation present. Every effort will be made to avoid sensitive vegetation.

The USACE, CDFW, and RWQCB impact acreages are further detailed in Tables 2-4 in Chapter 3. Vegetation communities within jurisdictional waters that may be impacted include: black willow thicket, mulefat thicket, California bulrush marsh, sedge patches, ragweed patches, upland mustards, and annual barley grassland. Additional non-vegetated land cover types within the impacted jurisdictional waters include open water, streambed, and disturbed/developed. There are no impacts to sensitive vegetation communities outside of the jurisdictional waters impacts.

Avoidance and Minimization Efforts

Every effort will be made to minimize the impacts to the natural resources and sensitive habitats due to construction. The construction access area will be minimized as much as feasible and standard best management practices will be put into place to minimize indirect impacts to surrounding resources. The following measures will be implemented in this effort:

BIO-1: The footprint of disturbance for access within the river shall be minimized to the maximum extent feasible and clearly marked in the field. Sensitive resources that can be avoided will be protected with orange snow fencing or similar material to minimize the potential for impacts. Access to sites shall be via preexisting access routes to the greatest extent possible. The biological monitor should confirm suitable marking/fencing prior to initiation of Project activities.

BIO-2: Temporarily impacted areas of jurisdictional waters will be restored to pre-project elevations.

BIO-3: The removal of potential nesting bird habitat will be conducted outside of the nesting season (February 1 to August 31) to the extent feasible. If grading or vegetation removal is to occur between February 1 and August 31, a nesting bird survey shall be conducted by a qualified biologist within no more than 72 hours of such scheduled disturbance, to determine the presence of nests or nesting birds. If active nests are identified, the biologist will establish appropriate buffers around the vegetation (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e. the juveniles are surviving independently from the nest). The onsite biologist will review and verify compliance with these nesting boundaries and will verify the nesting effort has finished. Work can resume within the buffer area when no other active nests are found. Alternatively, a qualified

biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to CDFW for mitigation monitoring compliance record keeping. If vegetation removal is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds.

BIO-4: The Project will implement standard best management practices (BMPs) to prevent direct and indirect impact to natural resources. BMPs will include by not be limited to:

- Watering of the site during Project activities will occur to minimize dust and reduce impacts to native vegetation adjacent to the Project.
- Prevent discharge of sediment and pollutants.
- No stockpiling in jurisdictional waters.
- Equipment storage and staging will occur outside of jurisdictional waters.
- Equipment will be checked for leaks. Proper maintenance to equipment will occur as needed. Fueling of equipment will occur in a manner that prevents potential runoff into jurisdictional waters.
- Invasive Species Management: imported material such as gravel and fill, and erosion control materials such as fiber rolls, straw wattles, and/or hay bales will be certified weed-free.
- Litter and pollution control: ensure that trash and food items are contained in animal-proof containers and removed at the end of the work day to avoid attracting opportunistic predators such as ravens, coyoted, and feral dogs.
- Cover trenches and other hazards to prevent capture of wildlife (all BMPs will be implemented in such as manner that they do not pose a barrier or threat to wildlife.

Compensatory Mitigation

Mitigation for all impacts to jurisdictional waters will be at a 2:1 ratio and 1:1 ratio for temporary impacts due to temporal loss. Mitigation for permanent impacts will be obtained through an approved mitigation bank or In Lieu Fee Program.

Cumulative Impacts

As detailed above, the Project is expected to impact a total of 2.15 acres of waters of the U.S. and 2.72 acres of waters of the State. Permanent impacts are limited to 57 square feet (0.001 acre). Permanent impacts will be fully mitigated as described above.

Implementation of the avoidance/minimization measures described above will limit any potential temporary and indirect impacts. Within the area of impact, the San Gabriel River is regularly maintained and managed (it appears vegetation removal occurs on a regular basis). By returning the site to pre-project elevations, there will be no net loss of habitat within the temporary impact areas when the regular disturbance (vegetation removal) is considered. Based on the mitigation and avoidance/minimization measures that will be implemented the Project is not considered to contribute to a cumulative impact.

Special Status Plant Species

Species of plants are afforded "special status" by federal agencies, state agencies, and/or non-governmental organizations (e.g., USFWS, CDFW, and United States Forest Service [USFS]) because of their recognized rarity, potential vulnerability to extinction, and local importance. These species typically have a limited geographic range and/or limited habitat and are referred to collectively as "special status" species. Plant species were considered "special status" species if they meet any of the following criteria.

- Taxa with official status under ESA, CESA, and/or the Native Plant Protection Act (NPPA).
- Taxa proposed for listing under ESA and/or CESA.
- Plants that meet the definition of rare or endangered under CEQA §15380(b) and (d). Species that may meet the definition of rare or endangered include the following:
    - Species considered by CNPS and CDFW to be "rare, threatened, or endangered in California" (California Rare Plant Rank [CRPR] 1A, 1B and 2) (CNPS 2019). A majority of the CRPR 3 and CRPR 4 plant species generally do not qualify for protection under CESA and NPPA.
    - Species that may warrant consideration on the basis of local significance or recent biological information.
    - Some species included on the CNDDB Special Plants, Bryophytes, and Lichens List (CDFW 2019h).
- Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

As documented in the focused rare plant survey report (Appendix C), two special status plant species were observed in the vicinity but outside of the Project Impact Area including Lewis's evening primrose (*Camissoniopsis lewisii*) and San Diego marsh elder (*Iva hayesiana*), and six special status plant species have the potential to occur within the BSA including: intermediate mariposa lily (*Calochortus weedii v*ar. *intermedius*), lucky morning-glory (*Calystegia felix*), southern tarplant (*Centromadia parryi* ssp. *australis*), small-flowered morning glory (*Convolvulus simulans*), Peruvian dodder (*Cuscuta obtusiflora* var. *glandulosa*), and San Bernardino aster (*Symphyotrichum defoliatum*).

DISCUSSION OF LEWIS'S EVENING PRIMROSE

Lewis's evening primrose is found typically in dune and coastal habitats including coastal strand, foothill woodlands, coastal sage scrub, and valley grasslands. The blooming period for the species is March – May.

Survey Results

Lewis's evening primrose was identified in two locations near but outside the Project Impact Area, adjacent to the paved bike path as shown in Figure 3. The first location found only a single plant near the bike path's intersection with Glencannon Drive. This individual was not blooming. The second location consisted of a small patch of approximately 15-20 individuals on the east-facing berm of the bike path between Loch Lomond Drive and Havenwood Street. Some of these were mature enough to identify to species.

Project Impacts

The CNPS gives this plant a rare plant rank of 3 (review list). It has not been reported in the area however this species is likely often overlooked as it is similar in appearance to other primroses. At this time more information is needed on the abundance and range of the species. In the future this species may be down listed to rare plant ranking of 4 (watch list).

The individuals were all located outside of the Project Impact Area, therefore no direct impacts to the species is expected to occur. Indirect impacts will be avoided and minimized as described below. No critical habitat is designative for the species.

Avoidance and Minimization Efforts

As noted above, direct impacts to Lewis's evening primrose will be avoided. Impacts to areas near the Lewis's evening primrose locations are expected to have a low potential for indirect impacts. Work activities along the bike path will be limited to construction access and repainting of the bike path. Avoidance/minimization measures BIO-1 and BIO-4 will be implemented to ensure protection of the species.

Compensatory Mitigation

No direct impacts to this species are expected and no impacts to persistence of the population are expected; therefore, no mitigation for this species is necessary.

Cumulative Impacts

As detailed above, the Project is not expected to have any direct impact on the Lewis's evening primose and no impact to the persistence of the population. Indirect effects will be minimized as possible through the measures noted above. Therefore, the Project is not expected to have any contribution to a cumulative impact.

DISCUSSION OF SAN DIEGO MARSH ELDER

San Diego marsh elder is found typically in wetlands and occasionally in non-wetlands. Habitats include playas, alkali sinks, and wetland-riparian. The blooming period for the species is April – October.

Survey Results

The rare plant focused survey in April 2019 identified one locality of the San Diego marsh elder, which was comprised of a single large plant (see Figure 3). The species is most commonly found in San Diego County and south Orange County, with only two other observations in Los Angeles County. This plant is located on the berm of the spreading grounds and appears to possibly have been planted as this species is often sold for ground cover and slope stabilization.

Project Impacts

The CNPS gives this plant a rare plant rank of 2B.2. The ranking identifies the species as plants that are rare, threatened, or endangered in California, but more common elsewhere. All of the plants constituting California Rare Plant Rank 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

The single individual was located outside of the Project Impact Area, therefore no direct impacts to the species is expected to occur. Indirect impacts will be avoided and minimized as described below. It is more likely that on-going vegetation management activities will impact this individual plant than the Project. No critical habitat is designated for this species.

Avoidance and Minimization Efforts

As noted above, direct impacts to San Diego marsh elder will be avoided. Impacts to areas near the San Diego marsh elder's location are expected to have a low potential for indirect impacts due to the fact the plant is located down the berm of the spreading grounds. Avoidance/minimization measures BIO-1 and BIO-4 will be implemented to ensure protection of the species.

Compensatory Mitigation

No direct impacts to this species are expected and no impacts to persistence of the population are expected; therefore, no mitigation for this species is necessary.

Cumulative Impacts

As detailed above, the Project is not expected to have any direct impact on the San Diego marsh elder and no impact to the persistence of the overall population. Furthermore, the observed individual was likely planted from nursery stock, and if that is the case then the genetic diversity of the population as a whole would not be affected by the Project even if the individual was directly impacted. Indirect effects will be minimized as possible through

the measures noted above. Therefore, the Project is not expected to have any contribution to a cumulative impact.

DISCUSSION OF LATE-BLOOMING PLANT SPECIES

The following species have some potential to occur within or in the vicinity of the Project Impact Area. These species have late blooming periods, so they could not be fully ruled out as absent from the Project site with the April 2019 survey. Therefore, the Project Impact Area, including their suitable habitats, is highly disturbed (either fully developed or in the case of the San Gabriel River is heavily maintained and managed). Therefore, the likelihood of presence is low. The following species are addressed in this section:

- Intermediate mariposa lily: found in rocky, calcareous chaparral, coastal scrub, valley/ foothill grassland. Blooming period is May – July.

- Lucky morning-glory: found in meadows and seeps (sometimes alkaline, and riparian scrub (alluvial). Blooming period is March – September.

- Southern tarplant: found in marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools. Blooming period is May – November.

- Small-flowered morning glory: found in open chaparral, coastal scrub, valley/ foothill grassland within clay, serpentinite seeps. Blooming period is March – July.

- Peruvian dodder: found in freshwater marshes and swamps. Blooming period is July – October.

- San Bernardino aster: found near ditches, streams, meadows, seeps, marshes & vernally mesic valley/ foothill grassland & other habitats. Blooming period July – November.

Survey Results

These six species were not observed during the focused rare plant survey. It was identified that marginal habitats exists onsite and a late season survey is recommended to confirm absence of these species.

Project Impacts

The species' listings are as follows:

- Intermediate mariposa lily is listed as a CNPS rare plant rank 1B.1

- Lucky morning-glory is listed as CNPS rare plant rank 1B.1

- Southern tarplant is listed as CNPS rare plant rank 1B.1

- Small-flowered morning glory is listed as CNPS rare plant rank 4.2

- Peruvian dodder is listed as CNPS rare plant rank 2B.2

- San Bernardino aster is listed as CNPS rare plant rank 1B.2

The CNPS rare plant rankings are described as follows:

- California Rare Plant Rank 1B: Plants Rare, Threatened, or Endangered in California and Elsewhere. All of the plants constituting California Rare Plant Rank 1B meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

- California Rare Plant Rank 2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere. All of the plants constituting California Rare Plant Rank 2 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. It is mandatory that they be fully considered during preparation of environmental documents relating to CEQA.

- California Rare Plant Rank 4 (formerly List 4): Plants of Limited Distribution - A Watch List. Very few of the plants constituting California Rare Plant Rank 4 meet the definitions of Sec. 1901, Chapter 10 (Native Plant Protection Act) or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and few, if any, are eligible for state listing. Nevertheless, many of them are significant locally, and CNPS and CDFG strongly recommend that California Rare Plant Rank 4 plants be evaluated for consideration during preparation of environmental documents relating to CEQA.

California Native Plant Society (CNPS) Threat Ranks: The CNPS Threat Rank is an extension added onto the California Rare Plant Rank (CRPR) and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension.

- 0.1 = seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

- 0.2 = fairly endangered in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

The potential habitat (primarily located within the San Gabriel River) is highly disturbed and there is low potential for these species presence within the Project Impact Area. The species were not identified during the April 2019 survey. Annual vegetation management reduces the likelihood of presence and if the species are present they are already subject

to impacts by on-going management activities. It is not expected the Project will have any impact on these species. No critical habitat is designated for any of these species.

Avoidance and Minimization Efforts

Impacts to habitat within the San Gabriel River and surrounding areas was minimized during Project planning. Permanent impacts within the San Gabriel River are limited to 0.001 acre (57 square feet) within the already disturbed riverbed. The 2.72 acres of temporary impacts within the San Gabriel River are within areas that are already subject to annual disturbance in the form of vegetation management. The following measure will be performed to ensure absence or mitigation of the species:

BIO-5: A follow-up, late season focused rare plant survey will be performed to confirm presence/absence of any sensitive plant species with potential to occur onsite. If sensitive species are identified within the impact area, CDFW will be consulted to determine an appropriate method to collect the species and reseed or relocate the plants prior to construction if they cannot be avoided.

Compensatory Mitigation

Should one or more of these late-blooming sensitive plant species be impacted, appropriate reseeding or relocation techniques to maintain the species population will be implemented, as coordinated with CDFW.

Cumulative Impacts

As detailed above, the Project is not expected to have any impact on these six late-blooming season plant species. If the species are identified during a late season, a follow-up survey then appropriate mitigation will be determined in consultation with CDFW. Therefore, in either case, there will either be no impacts, or the impacts will be fully mitigated, and the Project will not contribute to a cumulative effect.

Special Status Animal Species Occurrences

Wildlife species are afforded “special status” by federal agencies, state agencies, and/or non-governmental organizations (e.g., USFWS, CDFW, and United States Forest Service [USFS]) because of their recognized rarity, potential vulnerability to extinction, and local importance. These species typically have a limited geographic range and/or limited habitat and are referred to collectively as “special status” species. Wildlife species were considered “special status” species if they meet any of the following criteria.

- Taxa with official status under ESA, CESA, and/or the NPPA.
- Taxa proposed for listing under ESA and/or CESA.
- Taxa designated a species of special concern by CDFW.
- Taxa designated a state fully protected species by CDFW.
- Taxa identified as sensitive, unique or rare, by the USFWS, CDFW, USFS, and/or the United States Bureau of Land Management (BLM).

- Considered a locally significant species, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)) or is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). Examples include a species at the outer limits of its known range or a species occurring on an uncommon soil type.

There are two special status species that were identified from the inventory assembled from the USFWS Species List and CNDDB search that are considered to have potential to occur in the BSA including burrowing owl (*Athene cunicularia*) and coastal whiptail (*Aspidoscelis tigris stejnegeri*). No special status animal species were observed within the BSA during biological surveys.

DISCUSSION OF BURROWING OWL

Burrowing owl is typically a grassland species, but is often found in landscapes that have been highly altered by human activity. Primary constituents of suitable habitat include presence of burrows/cavities for roosting and nesting, and presence of relatively short herbaceous vegetation with sparse shrubs and trees. These owls' diet includes a broad selection of arthropods, small rodents, birds, amphibians, reptiles, and carrion. Burrowing owls are classified as Species of Special Concern by CDFW.

Survey Results

Suitable habitat for burrowing owl exists within the BSA. A few burrows of suitable size were observed within the BSA during the general biological survey and the surrounding habitat consists of many areas with short herbaceous vegetation or sparse vegetation. Although no burrowing owl were observed during the biological surveys there is potential for the species to occur onsite. There is no designated critical habitat for the species exists.

Project Impacts

Some of the greatest threats to burrowing owls are habitat loss and degradation from rapid urbanization of farmland, and eradication of ground squirrels. It is not expected any direct impact to the species will occur with implementation of the Project. Most of the Project impacts will be to disturbed/developed land that does not support burrowing owl. Since there were relatively few burrows present and maintenance is on-going in the area, the likelihood of burrowing owl presence is relatively low. Potential for indirect impacts are expected to be temporary at most and are expected to be minimal, if any. With implementation of the avoidance and minimization efforts, no permanent impacts to burrowing owl or their habitat are expected, no direct impacts are expected, and if temporary indirect impacts occur, they will be minimal.

Avoidance and Minimization Efforts

The following measure will be performed to prevent direct and indirect impacts to burrowing owl:

BIO-6: A pre-construction presence/absence survey for burrowing owl within the Project Impact Area where suitable habitat is present shall be conducted by a qualified biologist within 14 days prior to the commencement of ground disturbing activities. If active burrowing owl burrows are detected during the breeding season, all work

within an appropriate buffer (typically a minimum 300 feet) of any active burrow will be halted. If there is an active nest at the burrow, work will not proceed within the buffer until that nesting effort is finished. The onsite biologist will review and verify compliance with these boundaries and will verify the nesting effort has finished. Work can resume in the buffer when there are no occupied/active burrowing owl burrows found within the buffer area.

If active burrowing owl burrows are detected outside the breeding season or during the breeding season and its determined nesting activities have not begun (or are complete), then passive and/or active relocation may be approved following consultation with CDFW. The installation of one-way doors may be installed as part of a passive relocation program. Burrowing owl burrows shall be excavated with hand tools by a qualified biologist when determined to be unoccupied, and back filled to ensure that animals do not re-enter the holes/dens. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to CDFW for mitigation monitoring compliance record keeping.

Compensatory Mitigation

With implementation of the avoidance and minimization efforts, no impacts to this species are expected, therefore no mitigation for this species is expected to be necessary.

Cumulative Impacts

As detailed above, the Project is not expected to have any direct or permanent impact on burrowing owl. If there is any indirect or temporary impact, those will be minimized with implementation of the avoidance/minimization measure above. Additionally, due to the relatively low abundance of suitably-sized burrows onsite and on-going routine maintenance/management, the potential for presence onsite is low. Therefore, any potential indirect impacts are expected to be temporary and minimal and the Project will not contribute to a cumulative impacts.

DISCUSSION OF COASTAL WHIPTAIL

Coastal whiptail are slim bodied lizards found in a wide variety of habitats within their range including scrublands, grasslands, desert washes, pinon & juniper woodlands, riparian scrub, riparian woodland, and grasslands. Their habitat is typically hot and dry open areas with sparse foliage. The lizard grows up to a total length of around 13 inches. The species is classified as a Species of Special Concern by CDFW and a sensitive species by the BLM.

Survey Results

Marginally suitable habitat for coastal whiptail was identified within the BSA. Most of the areas within the Project Impact Area are heavily managed and maintained. The most likely areas for presence of this species is in the surrounding habitat near the access pathways within the BSA and outside of the Project Impact Area where there is less disturbance. The species was not observed during the biological surveys. No critical habitat designated for the species exists.

Project Impacts

It is not expected any direct impact to the species will occur with implementation of the Project. Most of the Project impacts will be to disturbed/developed land that is unlikely to host coastal whiptail. Potential for indirect impacts are expected to be temporary at most and are expected to be minimal, if any. With implementation of the avoidance and minimization efforts, no permanent impacts to coastal whiptail or their habitat are expected, no direct impacts are expected, and if temporary indirect impacts occur, they will be minimal.

Avoidance and Minimization Efforts

The following measure will be performed to prevent direct and indirect impacts to coast whiptail:

BIO-7: A pre-construction presence/absence survey for coastal whiptail will be performed by a qualified herpetologist within 30 days prior to the commencement of ground disturbing activities within the Project Impact Area and immediately adjacent areas where suitable habitat is present. If it is determined no suitable habitat is present within the Project Impact Area or immediately adjacent areas where there is potential for indirect impacts, within 30 days prior to Project construction then no presence/absence survey will be required. If a presence/absence survey is performed, then the survey methodology should be consistent with accepted protocols or guidelines for determining presence of sensitive reptile species in southern California. If the species or other special status species is detected during the survey, then a relocation and/or exclusionary plan will be developed in consultation with CDFW to prevent direct impacts to the species during Project construction.

Compensatory Mitigation

With implementation of the avoidance and minimization efforts, no impacts to this species are expected, therefore no mitigation for this species is expected to be necessary.

Cumulative Impacts

As detailed above, the Project is not expected to have any direct or permanent impact on coastal whiptail. If there is any indirect or temporary impact, those will be minimized with implementation of the avoidance/minimization measure above. Additionally, due to on-going routine maintenance/management, the potential for presence onsite is low. Therefore, any potential impacts are expected to be temporary and minimal and the Project will not contribute to a cumulative impact.

Chapter 5 – Conclusions and Regulatory Determinations

Federal Endangered Species Act Consultation Summary

A USFWS species list is attached in Appendix A. No listed species or critical habitat occur or are considered to have the potential to occur within the Project Impact Area. Therefore, no effects to species listed under the federal endangered species act are anticipated and consultation with USFWS is not necessary for the Project.

This project is located outside of NOAA Fisheries jurisdiction, therefore a NOAA Fisheries species list is not required and no effects to NOAA Fisheries species are anticipated.

Essential Fish Habitat Consultation Summary

This project is located outside of NOAA Fisheries jurisdiction; therefore, a NOAA Fisheries Essential Fish Habitat consultation is not required and no effects to NOAA Fisheries species are anticipated.

California Endangered Species Act Consultation Summary

No state-listed endangered or sensitive species were observed or are considered to have at least moderate potential to occur within the Project site. No take of state-listed species is anticipated, therefore a consultation with the Department of Fish and Wildlife regarding the California Endangered Species Act is not required.

Wetlands and Other Waters Coordination Summary

Jurisdictional waters occur within and near the project site. These waters include Waters of the U.S., under USACE Jurisdiction and Waters of the State, under CDFW Jurisdiction. Both of these also fall under RWQCB Jurisdiction. Permits that will be required for this project include a USACE Section 404 permit, a RWQCB Section 401 Water Quality Certification, and a CDFW Section 1600 Streambed Alteration Agreement. A Jurisdictional Delineation report is attached as Appendix B.

Invasive Species

Invasive species observed within the BSA include wild radish, shortpod mustard, poison hemlock (*Conium maculatum*), castor bean, and foxtail barley. Avoidance/minimization measures BIO-4 requires any fill or BMP materials (straw wattles, fiber roll, hay bales) be certified weed-free for use onsite to prevent the spread of invasive speceis. Additionally any landscaping that will be planted in association with the Project will avoid the use of any species identified as invasive on the California Invasive Plant Council (Cal-IPC) [any rating on the list].

Migratory Bird Treaty Act

The Project Impact Area and BSA support habitat suitable for a variety of migratory birds. Birds observed during the general biological survey included the following: red- winged blackbird, common mallard, great blue heron, red-tailed hawk, turkey vulture, killdeer, American crow, snowy egret, barn swallow, nutmeg mannikin, American coot, northern

mockingbird, bushtit, common grackle, black phoebe, Say's phoebe, yellow-rumped warbler, cinnamon teal, lesser goldfinch, and white-crowned sparrow.

To prevent direct and indirect impacts to nesting birds, as required by the Migratory Bird Treaty Act, avoidance/minimization measure BIO-3 will be implemented.

Maternity Colonies and Roosting Bats

The Project Impact Area contains habitat including trees and shrubs and other habitat that could support roosting bats, as common to any location containing such features. Section 4150 of the California Fish and Game Code prohibits incidental or deliberate "take" of non-game mammals, including bats. Potential impacts to bats will be avoided with a pre-construction survey conducted prior to initiation of work as follows:

BIO-8: A qualified biologist shall conduct a preconstruction survey to determine if active bat roosts are present at the Site. The survey shall be conducted no earlier than 72 hours prior to commencement of vegetation removal that would occur during the breeding season of bat species potentially utilizing the Site (April 1 through August 31). If work begins outside of breeding season, no roosting bats are found, or if bats have not established an active maternity roost, no further mitigation is required. If an established maternity roost is found, either (A) postpone or halt construction within 200 feet of the roost until the roost is vacated and juveniles have fledged, or (B) require that a qualified biologist develop alternative measures, such as biological monitoring during active construction within the 200-foot buffer to ensure established maternity roosts are not impacted.

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Appendix A – Database Search Results: USFWS Species List, CNDDB List, CNPS List

USFWS Species List

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Los Angeles County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Burrowing Owl Athene cunicularia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Dec 31

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

Costa's Hummingbird Calypte costae — Breeds Jan 15 to Jun 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9470

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Spotted Towhee Pipilo maculatus clementae — Breeds Apr 15 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/4243

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Willet Tringa semipalmata — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

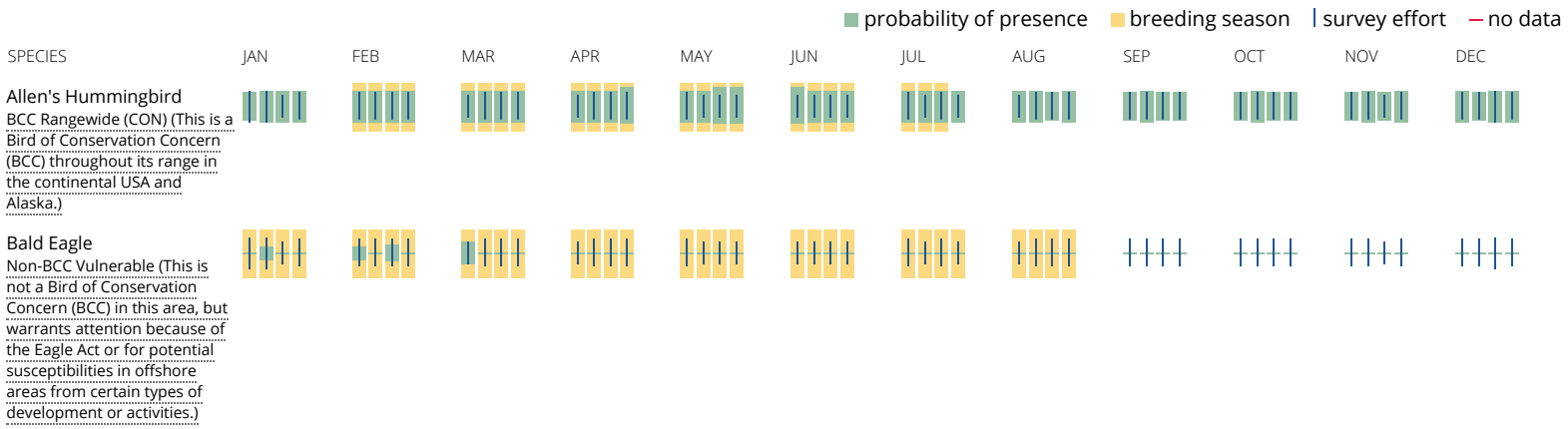
Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

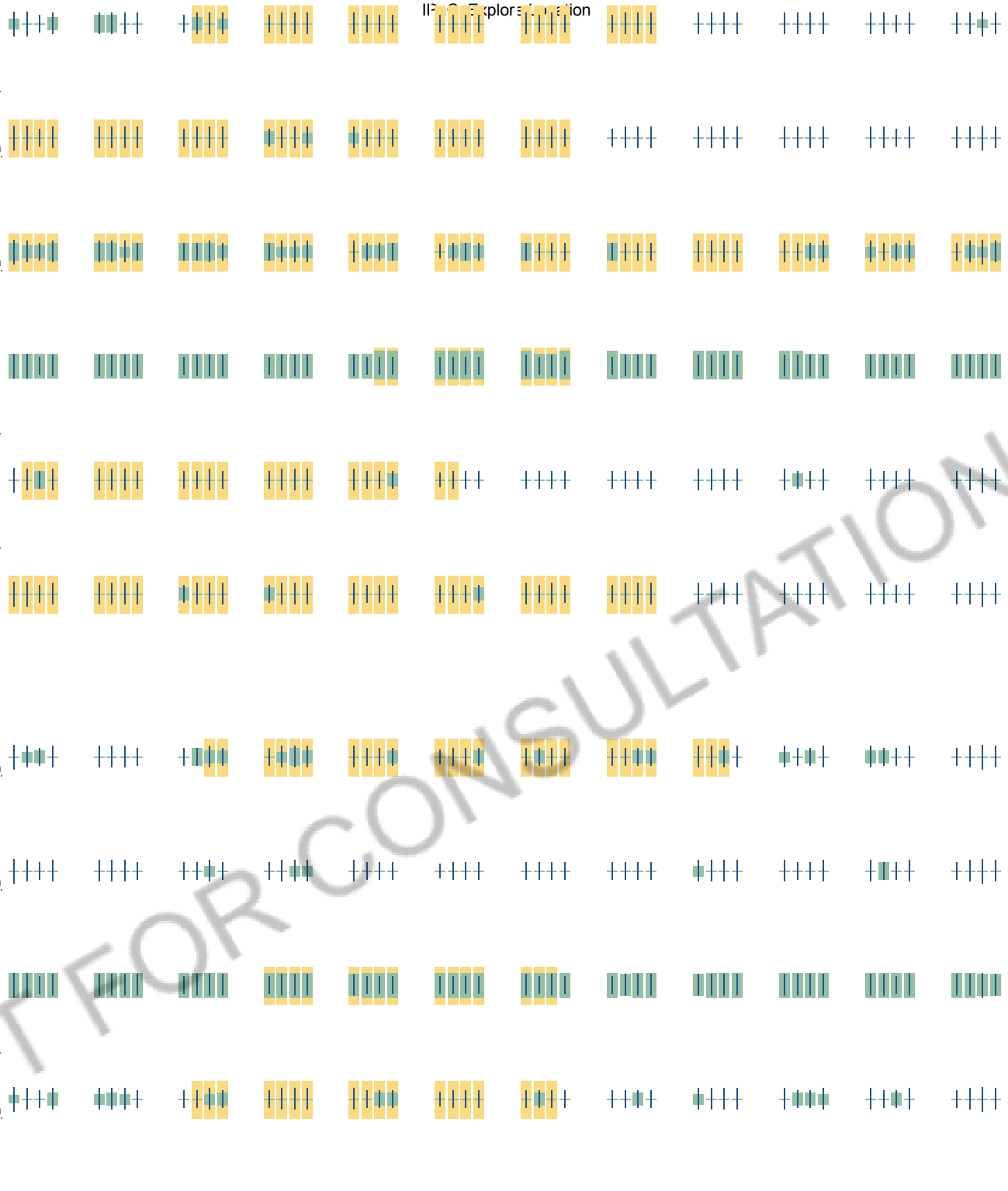
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

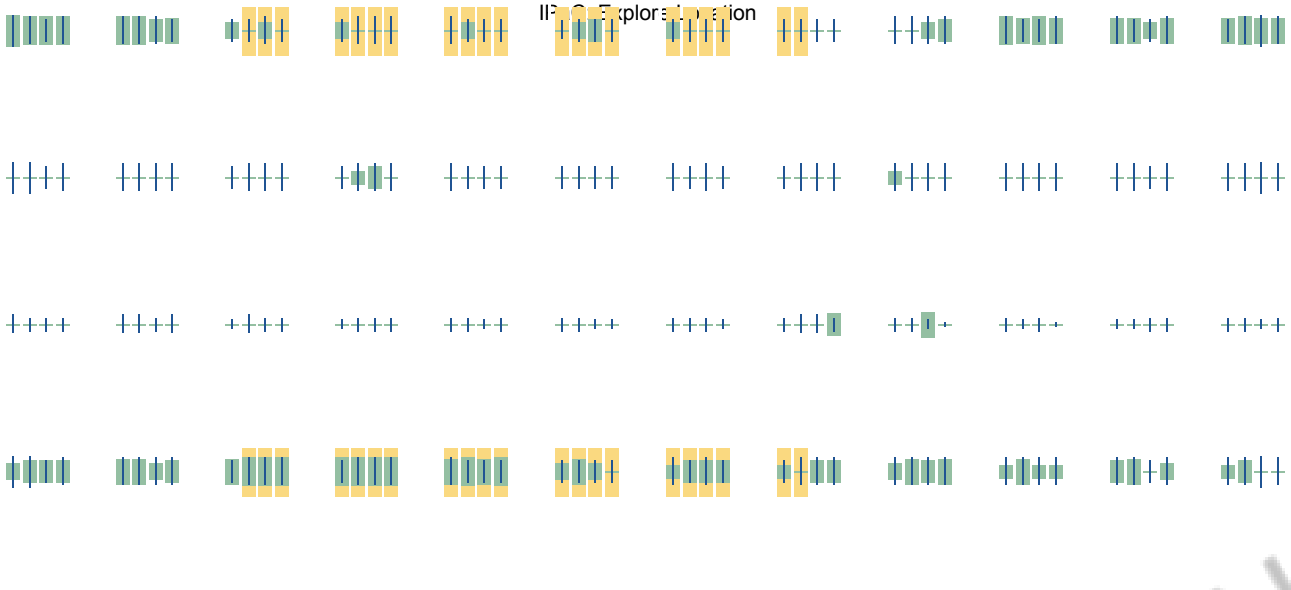
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

PUSCx

LAKE

L2USCx

RIVERINE

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

CNPS Database List

CNPS Species List

Scientific Name	Common Name	CRPR	GRank	SRank	CESA	FESA
Calystegia felix	lucky morning-glory	1B.1	G1Q	S1	None	None
Dudleya multicaulis	many-stemmed dudleya	1B.2	G2	S2	None	None
Juglans californica	Southern California black walnut	4.2	G4	S4	None	None
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	1B.1	G4T2	S2	None	None
Navarretia prostrata	prostrate vernal pool navarretia	1B.1	G2	S2	None	None
Ribes divaricatum var. *parishii*	Parish's gooseberry	1A	G5TX	SX	None	None

Search Criteria included:

- One Quadrant – 3311881-Whittier
- Elevation – 0 to 300 feet
- County – Los Angeles

CNDDB Search List

CNDDB Species List (2 mile radius from Project site)

Scientific Name	Common Name	Presence	SiteDate	ELMDate
Riparia riparia	bank swallow	Extirpated	18940704	18940704
Riparia riparia	bank swallow	Extirpated	18940704	18940704
Dudleya multicaulis	many-stemmed dudleya	Presumed Extant	XXXX	XXXX
Calystegia felix	lucky morning-glory	Presumed Extant	19020501	19020501
Vireo bellii pusillus	least Bell's vireo	Possibly Extirpated	18990507	18990507
Bombus crotchii	Crotch bumble bee	Presumed Extant	XXXX	XXXX
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Possibly Extirpated	20110711	195105XX
Vireo bellii pusillus	least Bell's vireo	Presumed Extant	20110909	20110909
Phrynosoma blainvillii	coast horned lizard	Presumed Extant	19600415	19600415
Phrynosoma blainvillii	coast horned lizard	Presumed Extant	XXXX	XXXX
Polioptila californica californica	coastal California gnatcatcher	Presumed Extant	20170301	20170301
Aspidoscelis tigris stejnegeri	coastal whiptail	Presumed Extant	20001117	20001117
Athene cunicularia	burrowing owl	Presumed Extant	20100216	20100114
Aspidoscelis tigris stejnegeri	coastal whiptail	Presumed Extant	20001117	20001117

Scientific Name	FEDLIST	CALLIST	GRANK	SRANK	RPLANTRANK	CDFWSTATUS	Other Status
Riparia riparia	None	Threatened	G5	S2	--	--	BLM_S; IUCN_LC
Riparia riparia	None	Threatened	G5	S2	--	--	BLM_S; IUCN_LC
Dudleya multicaulis	None	None	G2	S2	1B.2	--	BLM_S; SB_RSABG; USFS_S
Calystegia felix	None	None	G1Q	S1	1B.1	--	--
Vireo bellii pusillus	Endangered	Endangered	G5T2	S2	--	--	IUCN_NT; NABCI_YWL
Bombus crotchii	None	None	G3G4	S1S2	--	--	--
Coccyzus americanus occidentalis	Threatened	Endangered	G5T2T3	S1	--	--	BLM_S; NABCI_RWL; USFS_S; USFWS_BCC

Vireo bellii pusillus	Endangered	Endangered	G5T2	S2	--	--	IUCN_NT; NABCI_YWL
Phrynosoma blainvillii	None	None	G3G4	S3S4	--	SSC	BLM_S; IUCN_LC
Phrynosoma blainvillii	None	None	G3G4	S3S4	--	SSC	BLM_S; IUCN_LC
Polioptila californica californica	Threatened	None	G4G5T2Q	S2	--	SSC	NABCI_YWL
Aspidoscelis tigris stejnegeri	None	None	G5T5	S3	--	SSC	--
Athene cunicularia	None	None	G4	S3	--	SSC	BLM_S; IUCN_LC; USFWS_BCC
Aspidoscelis tigris stejnegeri	None	None	G5T5	S3	--	SSC	--

Appendix B – Jurisdictional Delineation Report

Jurisdictional Delineation Report
Pico Rivera Regional Bikeway Project

Prepared for:
City of Pico Rivera
6615 Passons Boulevard
Pico Rivera, CA 90660
(562) 801-4351
Contact: Kenner Guerrero

***Prepared by*:**

VCS Environmental
EXPERT SOLUTIONS | CEQA-NEPA . Biology . Regulatory

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May 2019

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LIST OF ABBREVIATIONS AND ACRONYMS

BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CWA	Clean Water Act
FGC	Fish and Game Code
OHWM	Ordinary High Water Mark
RWQCB	Regional Water Quality Control Board
USACE	United States Army Corps of Engineers
VCS	VCS Environmental
WOS	Waters of the State
WOUS	Waters of the United States

1.0 Introduction

The purpose of this report is to provide the results of the jurisdictional delineation conducted by VCS Environmental for the Pico Rivera Regional Bikeway Project (Project) as required by the United States Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB), collectively called "the Agencies". This report provides the documentation required to process a Section 404 Nationwide Permit, a Section 1602 Streambed Alteration Agreement, and a Section 401 Water Quality Certification (regulatory permits).

The City of Pico Rivera is proposing to construct a 1.5-mile bicycle facility along Mines Avenue, a bike/pedestrian bridge over the San Gabriel River, and a bicycle facility along Dunlap Crossing Road. The Project would construct a Class IV separated bikeway along Mines Avenue from Paramount Boulevard in the west to the existing Class I bike trail along the San Gabriel River in the east. The Project also includes a new bridge structure and Class I and II bike lanes along Dunlap Crossing Road from the San Gabriel River to Norwalk Boulevard. The alignment along Dunlap Crossing Road will connect an existing publicly accessible bike path on the west side of the San Gabriel River to the San Gabriel River Mid Trail. The Proposed improvements on Mines Avenue include but are not limited to: pavement reconstruction; installation of bioswales, stormwater catch basins and other improvements such as, reconfiguration of parking lanes; upgrading street lights; traffic signal modifications at Rosemead Boulevard and Mines Avenue; signage; striping; utility relocation; and landscaping. The only Jurisdictional area within the Project footprint is the San Gabriel River. Therefore, the only portion of the Project subject to regulatory permits is the new bike bridge over the river.

The proposed Project would cause permanent and temporary impacts to the San Gabriel River which are considered Waters of the United States (WOUS) and State (WOS). The permanent impacts are the result of bridge piers that will be installed in the San Gabriel River totaling approximately 57.0 square feet. Temporary impacts for the construction zone and construction access will also occur.

Mines Avenue Bikeway Bridge

The Mines Avenue Bikeway Bridge would be constructed approximately 800 feet downstream of the Whittier Boulevard Crossing over the San Gabriel River. The western end of the bridge would generally be constructed at the location where the San Gabriel River Spreading Basins Trail and the San Gabriel River Trail meets. The eastern end of the bridge would tie into the existing San Gabriel River Trail.

The proposed Mines Avenue Bikeway Bridge would have a width of 8 feet and span approximately 350 feet over the San Gabriel River. The bridge would be a prefabricated structure that would be installed in segments. The construction activities for the bikeway bridge would involve 3 primary construction phases; mobilization, construction of bridge foundations and installation of the bridge.

2.0 Project Information

2.1 Contact Information

Applicant:
Kenner Guerrero
City of Pico Rivera
6615 Passons Blvd.
Pico Rivera, CA 90660
(562) 801-4351
kguerrero@pico-rivera.org

VCS Contact Person:
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30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, CA 92675
(949) 489-2700 x213
wcaffrey@vcsenvironmental.com

2.2 Project Location

The Project site is located in the City of Pico Rivera (City), County of Los Angeles, California; approximately 2.5 miles from the southern City limits and 3.5 miles from the northern City limits. The Project site is approximately 0.30 miles west of the Interstate 605 freeway (I-605) between Whittier Boulevard and Mines Avenue to the west and Dunlap Crossing Road to the east. The bike lanes on Mines Avenue will run the width of the City. The Project is located within the San Bernardino Meridian, Township 2S, Range 11W, Section 18. A regional location and vicinity map are attached as Figures 1 and 2, respectively. The Biological Study Area (BSA) shown on Figure 3, included the entire Project site of Mines Avenue, Dunlap Crossing Road, the pathway around the San Gabriel Coastal spreading grounds adjacent to the San Gabriel River, and a portion of the San Gabriel River.

2.3 Land Uses

The Project site consists of developed residential streets, a portion of the San Gabriel River, and an existing paved pathway around the spreading grounds used for flood control and water conservation located south of Whittier Boulevard, north of Mines Avenue, and west of the San Gabriel River. The Project is bisected by the San Gabriel River but otherwise surrounded by developed residential and commercial land. As noted above, the only jurisdictional feature within the Project footprint is the San Gabriel River.

3.0 Setting

3.1 Description

The Project will permanently impact a total of approximately 57.0 square feet of jurisdictional WOUS and WOS for construction of bridge piers. Temporary impacts will include a construction zone, which is an area approximately 50 feet wide on each side of the bridge as shown on Figures 4a and 4b. The remainder of the area identified as temporarily impacted is expected to be reduced to only what is necessary for access. This will depend on the vegetation regime at the time of construction. We therefore identified a larger area than necessary and will provide a construction as-built to the Agencies for the actual amount of impact. Prior to construction, a qualified biologist will meet with the contractor to identify the least impactful method to access the construction zone. Any sensitive vegetation within the temporary construction access area will be avoided. Work will occur outside of the flood season, and no work will occur during high flow regimes. If low flow is present during construction, a diversion technique will be identified for approval by the Agencies.

This portion of the San Gabriel River is a soft bottom channel lined with concrete riprap along the slopes. Adjacent to the Project impacts are the San Gabriel Coastal spreading grounds which contain jurisdictional waters; however, these will not be impacted. During the delineation of the Project, VCS Environmental biologists took soil samples at different locations throughout the BSA to determine wetland and non-wetland areas. Soil sample locations are shown in Figure 4a.

3.2 Vegetation

The upland ruderal areas within the San Gabriel River have mostly non-native plant species such as short pod mustard (*Hirschfeldia incana),* wild radish (*Raphanus sativus*), red-stemmed filaree (*Erodium cicutarium*), sow thistle (*Sonchus oleraceus*), prickly lettuce (*Lactuca serriola*), toothed dock (*Rumex dentatus*), and annual barley grassland (*Hordeum murinum*). Vegetation within the lower limits of the San Gabriel River appears to be disturbed with routine annual maintenance; species present include swamp smartweed (*Periscaria hydropiperoides*), Bermuda grass (*Cynodon dactylon*), weakleaf bur ragweed (*Ambrosia confertiflora*), common sunflower (*Helianthus annuus*), English plantain (*Plantago lanceolata*), California bulrush (*Schoenoplectus californicus*), mulefat (*Baccharis salicifolia*), and black willow (*Salix gooddingii*) as shown in Table 1 below. The developed area, which includes the existing bike path, contains ornamental species such as silk floss tree (*Ceiba speciosa*) and carob tree (*Ceratonia siliqua*), and a few native landscaped species, such as California bush sunflower (*Encelia californica*) and white sage (*Salvia apiana*). A Vegetation Map is attached as Figure 5.

Table 1: Vegetation Present in the San Gabriel River

Impact Type	Wetland	Dominant Vegetation*	Latitude (centerpoint)	Longitude (centerpoint)
Permanent (0.001 acres) and Temporary	Emergent Wetland/Emergent Riparian	Bermuda grass (*Cynodon dactylon*) [FACU], common sunflower (*Helianthus annuus*) [FAC], swamp smartweed (*Persicaria hydropiperoides*) [OBL], weakleaf bur ragweed (*Ambrosia confertiflora*) [NI], rough cocklebur (*Xanthium strumarium*) [FAC]	33.992984	-118.073483
Temporary	Wetland/Riparian	Bulrush (*Shoenoplectus californicus*) [OBL], swamp smartweed, weakleaf bur ragweed, black willow (*Salix gooddingii*) [FACW], mulefat (*Baccharis salicifolia*) [FAC]	33.993110 33.992746	-118.073779 -118.073109
Temporary	Non-wetland/streambed	Wild radish (*Raphanus sativus*) [NI], Bermuda grass, disturbed/developed	33.993250 33.992553	-118.073795 -118.073196

*UPL = Upland Species; FAC = Facultative; FACU = Facultative Upland Species; FACW = Facultative Wetland; OBL = Obligate; NI = No Indicator (USDA 2019b)

3.3 Hydrology

The Project site is located in the San Gabriel River Watershed. The San Gabriel River Watershed lies mostly within Los Angeles County with small portions in San Bernardino and Orange Counties. The San Gabriel River flows from the San Gabriel Mountains in the north through the Los Angeles Coastal Plain, and empties into the Los Angeles/Long Beach Harbor. The major tributaries to the San Gabriel River are Walnut Creek, San Jose Creek, and Coyote Creek. The Project site topography is relatively flat overall with elevations ranging from 146 feet to 160 feet. The average annual rainfall of Pico Rivera, CA is approximately 17 inches.

The Project site overlies the Puente Basin within the San Gabriel Valley Groundwater Basin (San Gabriel Basin). The San Gabriel Basin is located in eastern Los Angeles County, where it underlies most of the San Gabriel Valley and a portion of the upper Santa Ana Valley.

3.4 Soil

The United States Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey lists four soil types for the Project site and BSA. The soil types within the Project site and BSA are listed below.

Urban land-Hueneme, drained-San Emigdio complex [1000] – 0 to 2% slopes

This soil complex is usually found on alluvial fans at elevations from 10 to 300 feet. It is very slightly saline to slightly saline and somewhat poorly drained. Its distribution profile ranges from sandy loam to loamy sand.

Urban land-Biscailuz-Hueneme, drained complex [1005] - 0 to 2 percent slopes

This soil complex is usually found on alluvial fans at elevations from 0 to 190 feet. It is nonsaline to very slightly saline and somewhat poorly drained. Its distribution profile ranges from loam to very fine sandy loam.

*Pits and Quarries [1180]

This soil complex is usually found on alluvial fans at elevations 10 – 1950 feet.

*Xeropsamments, frequently flooded [1264] - 0 to 2% slopes

This soil complex is usually found in channels and rivers at elevations from 100 to 460 feet. It is susceptible to frequent flooding and is somewhat excessively drained. Its distribution profile is stratified sand.

The United States Department of Agriculture (USDA) Natural Resources Conservation Service lists two of the above as hydric soils (USDA 2019), Pits and Quarries [1180] and Xeropsamments [1264]. A soils map is attached as Figure 6.

**Soil type is within jurisdictional waters*

4.0 Methodology

4.1 Delineation Statement

USACE

The BSA was assessed for jurisdictional wetland and non-wetland WOUS. To determine the presence of a wetland, three indicators are required: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The methodology published in the USACE 1987 Wetland Delineation Manual and the Arid West Supplement sets the standards for meeting each of the three indicators, which normally require that 50 percent or more dominant plant species typical of a wetland, soils exhibiting characteristics of saturation, and hydrological indicators be present.

Jurisdictional non-wetland WOUS are typically determined through the observation of an Ordinary High Water Mark (OHWM), which is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR 328.3(e)). The following guidance documents were utilized in making this determination:

- Field Guide to OHWM Determinations in the Arid West (August 2008);
- Updated OHWM Datasheet for the Field Guide to OHWM Determinations in the Arid West (July 2010); and
- Ordinary High Flows and the Stage-Discharge Relationship in the Arid West Region (2011).

Projects with impacts to WOUS are regulated under Sections 401 and 404 of the Clean Water Act and by connectivity with adjacent watersheds. Section 401 of the CWA (33 U.S.C. 1341) requires any applicant of a federal license or permit conducting any activity that may result in a discharge of a pollutant into WOUS to obtain certification from the state in which the discharge originates.

CDFW

CDFW has jurisdiction over WOS (California Fish and Game Code §§1600 et seq.; California Code of Regulations, Title 14, §720). Section 1602 of the California Fish and Game Code (FGC) applies to natural rivers, streams, and lakes:

> "An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material

> containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake."

CDFW defines a stream as "a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic course regime, and where the width of its course can reasonably be identified by physical or biological indicators" (Brady and Vyverberg 2013). CDFW regulates wetland areas only to the extent that those wetlands are part of a stream, river, or lake as defined by the CDFW. Based on the collective results of these investigations, areas that exhibited physical or biological indicators determined to be within the jurisdiction of CDFW were mapped. CDFW regulates activities that would alter the flow, bed, channel or bank of streams and lakes by issuing Lake or Streambed Alteration Agreements. In riparian areas, CDFW jurisdictional limits are usually delineated by the top of the stream or lake banks, or the outer edge of riparian vegetation; whichever is wider.

To determine the areas where waters flow or have flowed and the width of its course, the delineators conducted a site visit to walk the entire site; reviewed previous biological, cultural, and construction reports on the site; and reviewed historical aerial imagery. Based on the collective results of these investigations, areas that exhibited physical or biological indicators determined to be within the jurisdiction were mapped. The VCS delineators concluded that the site does exhibit the characteristics of a stream, river, or lake, and therefore WOS are present, which are shown on Figure 3b.

RWQCB

The RWQCB has jurisdiction over both Waters of the State and Waters of the United States (Porter-Cologne Water Quality Control Act; California Code or Regulations title 23, section 3831(w); Executive Order W-59-93; Section 401 of the CWA; 33 U.S.C. 1341). As identified in the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State adopted on April 2, 2019,

> "The Water Boards define an area as wetland as follows:
>
> > An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The Water Code defines "waters of the state" broadly to include "any surface water or groundwater, including saline waters, within the boundaries of the state." "Waters of the state" includes all "waters of the U.S." The following wetlands are waters of the state:

1. Natural wetlands,
2. Wetlands created by modification of a surface water of the state, and
3. Artificial wetlands that meet any of the following criteria:

    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;

    b. Specifically identified in a water quality control plan as a wetland or other water of the state;

    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or

    d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

        i. Industrial or municipal wastewater treatment or disposal,
        ii. Settling of sediment,
        iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
        iv. Treatment of surface waters,
        v. Agricultural crop irrigation or stock watering,
        vi. Fire suppression,
        vii. Industrial processing or cooling,
        viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
        ix. Log storage,
        x. Treatment, storage, or distribution of recycled water, or
        xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
        xii. Fields flooded for rice growing

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the

wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state."

Projects with impacts to RWQCB jurisdictional waters would either be required to obtain a Section 401 Water Quality Certification or a Waste Discharge Requirements permit, depending on whether the Project has impacts to both Waters of the United States and Waters of the State, or only Waters of the State. Furthermore, impacts to RWQCB jurisdiction may be subject to an Alternative Analysis, should a) permanent impacts to more than two tenths of an acre or 300 lineal feet of waters of the State be required, b) the Project supports rare, threatened or endangered species habitat In the waters of the State, or c) the Project would result in impacts to wetlands.

In summary, the San Gabriel River would be considered jurisdictional by the USACE, CDFW, and RWQCB.

4.2 Dates of Field Work

The jurisdictional delineation was conducted on March 15, 2019 by Wade Caffrey, Erin Hayes, and Sierra Coleman.

5.0 Results

5.1 Waters of the United States and Waters of the State

Permanent Impacts

Permanent Impacts to USACE, CDFW, and RWQCB jurisdiction within the Project site include approximately 57.0 square feet (0.001 acre) to emergent wetlands for construction of two bridge piers.

Temporary Impacts.

Temporary impacts to USACE, CDFW, and RWQCB jurisdiction within the Project site will be caused by:

1. A construction impact zone defined as 50 feet upstream and downstream of the proposed bridge estimated at approximately 0.77 acres; and
2. Equipment access to the construction zone estimated at approximately 20 feet in width, but the actual path may vary depending on the access point(s) and vegetation present.[1] Every effort will be made to avoid sensitive vegetation.

Following completion of bridge construction, an after the fact map with the actual area of temporary impacts will be provided to the Agencies and the impacted vegetated areas will be returned to their prior state.

A jurisdictional delineation map is attached as Figure 3a and 3b.

The USACE, CDFW, and RWQCB impacts and jurisdiction are further classified in Tables 2-7 below.

Table 2: Approximate Impacts to USACE Jurisdictional Waters

Impact Type	Impact Acreage
Total Permanent – Emergent Wetland	0.001*
Total Temporary	2.16
Wetland	0.57
Emergent Wetland	1.38
Non-wetland	0.21

*0.001 acre = 57.0 square feet

[1] Ultimate impacts are expected to be limited to access and/or water diversion if needed. Water diversion would be approved in advance by CDFW and RWQCB.

Table 3: Approximate Impacts to CDFW Jurisdictional Waters

Impact Type	Impact Acreage
Total Permanent –Emergent Riparian	0.001*
Total Temporary	2.72
Riparian	0.58
Emergent Riparian	1.38
Streambed	0.76

*0.001 acre = 57.0 square feet

Table 4: Approximate Impacts to RWQCB Jurisdictional Waters

Impact Type	Impact Acreage
Total Permanent –Emergent Wetland	0.001*
Total Temporary	2.72
Wetland	0.58
Emergent Wetland	1.38
Non-Wetland	0.76

*0.001 acre = 57.0 square feet

Table 5: USACE Jurisdiction Measurements

Impact Type	Wetland	Cowardin Class	Acreage	Linear Feet	Width
Permanent (0.001 acres) and Temporary	Emergent Wetland	R4SBCx	1.38 acre	415 feet	240 feet
Temporary	Wetland	R4SBCx	0.57 acre	760 feet	35 feet
Temporary	Non-wetland	N/A	0.21 acre	765 feet	25 feet
Total			**2.16 acres**	**1940 feet**	**N/A**

Table 6: CDFW Jurisdiction Measurements

Impact Type	Wetland	Cowardin Class	Acreage	Linear Feet	Width
Permanent (0.001 acres) and Temporary	Emergent Riparian	R4SBCx	1.38 acre	415 feet	240 feet
Temporary	Riparian	R4SBCx	0.58 acre	760 feet	40 feet
Temporary	Streambed	N/A	0.76 acre	1000 feet	40 feet
Total			**2.72 acres**	**2175 feet**	**N/A**

Table 7: RWQCB Jurisdiction Measurements

Impact Type	Wetland	Cowardin Class	Acreage	Linear Feet	Width
Permanent (0.001 acres) and Temporary	Emergent Wetland	R4SBCx	1.38 acre	415 feet	240 feet
Temporary	Wetland	R4SBCx	0.58 acre	760 feet	40 feet
Temporary	Non-Wetland	N/A	0.76 acre	1000 feet	40 feet
Total			**2.72 acres**	**2175 feet**	**N/A**

5.2 Photo Documentation

Photopages are attached as Appendix A.

5.3 Data

Wetland Determination Data forms are attached to this document as Appendix B.

6.0 Conclusions

Permanent impacts to USACE WOUS will be approximately 57.0 square feet (0.001 acres) within the emergent wetland area shown on Figure 4a. USACE jurisdiction through WOUS totals 2.16 acres, with temporary impacts to 0.57 acre of wetlands, 1.38 acres of emergent wetlands, and 0.21 acre of non-wetlands. A Section 404 permit would be required for these impacts.

Permanent impacts to CDFW WOS will be approximately 57.0 square feet (0.001 acres) within the emergent riparian area shown on Figure 4b. CDFW jurisdiction through WOS totals 2.72 acres, with temporary impacts to 0.58 acre of riparian, 1.38 acres of emergent riparian, and 0.76 acre of streambed. A Section 1600 permit would be required for these impacts.

RWQCB jurisdiction includes both WOUS and WOS described above. A 401 certification would be required for these impacts.

7.0 References

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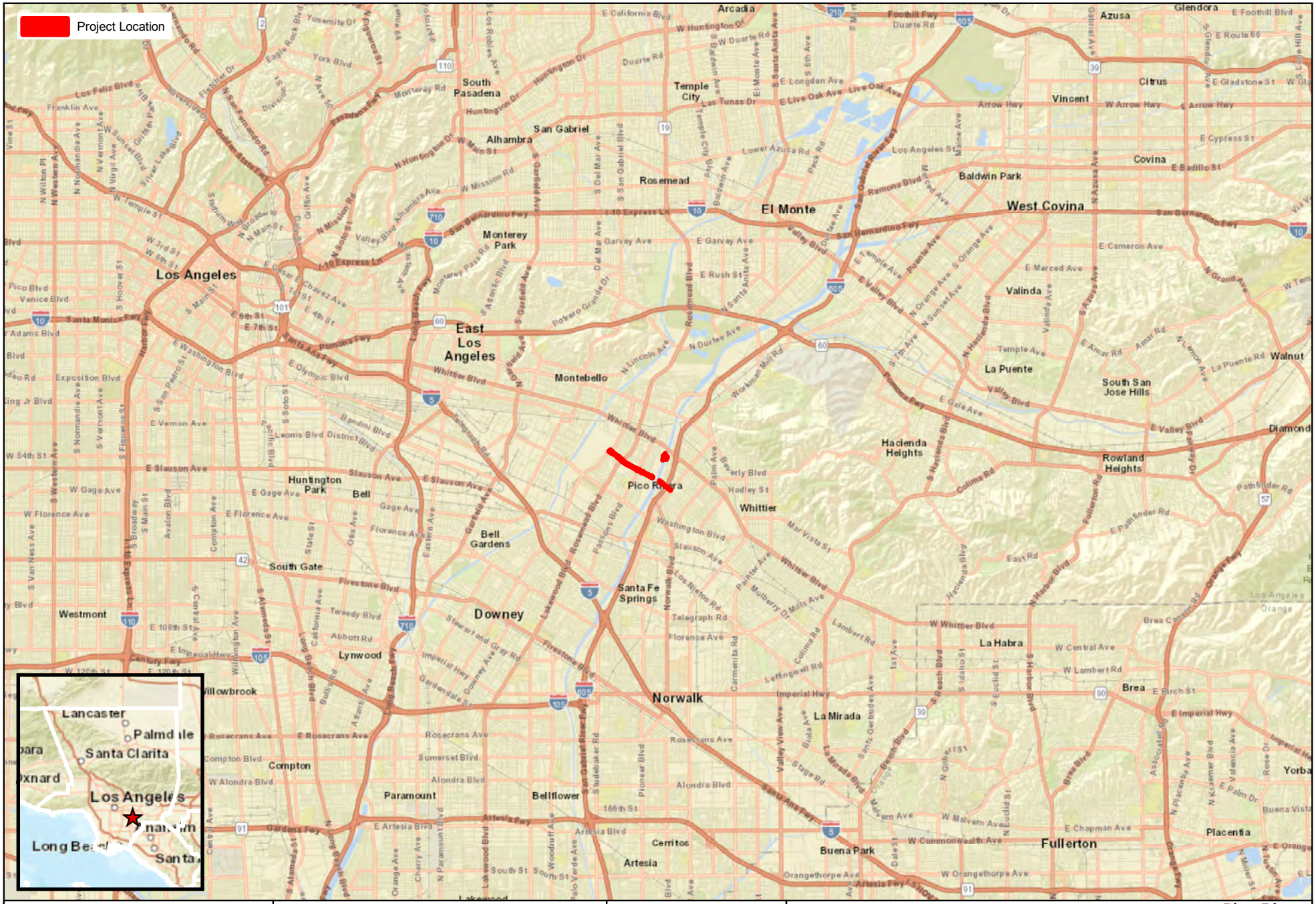
Figures



Prepared By:

VCS Environmental

Map Created: April 2019

Data Source: ESRI

Pico Rivera
Regional Bikeway Bridge Project

Figure 1

Project Location Map

Prepared By:

VCS Environmental

Map Created: April 2019

0 1,500 3,000 Feet

Data Source: BING, City of Pico Rivera, BFK

Figure 2

Pico Rivera Regional Bikeway Bridge Project

Project Impact Area

Prepared By:

VCS Environmental

Map Created: April 2019

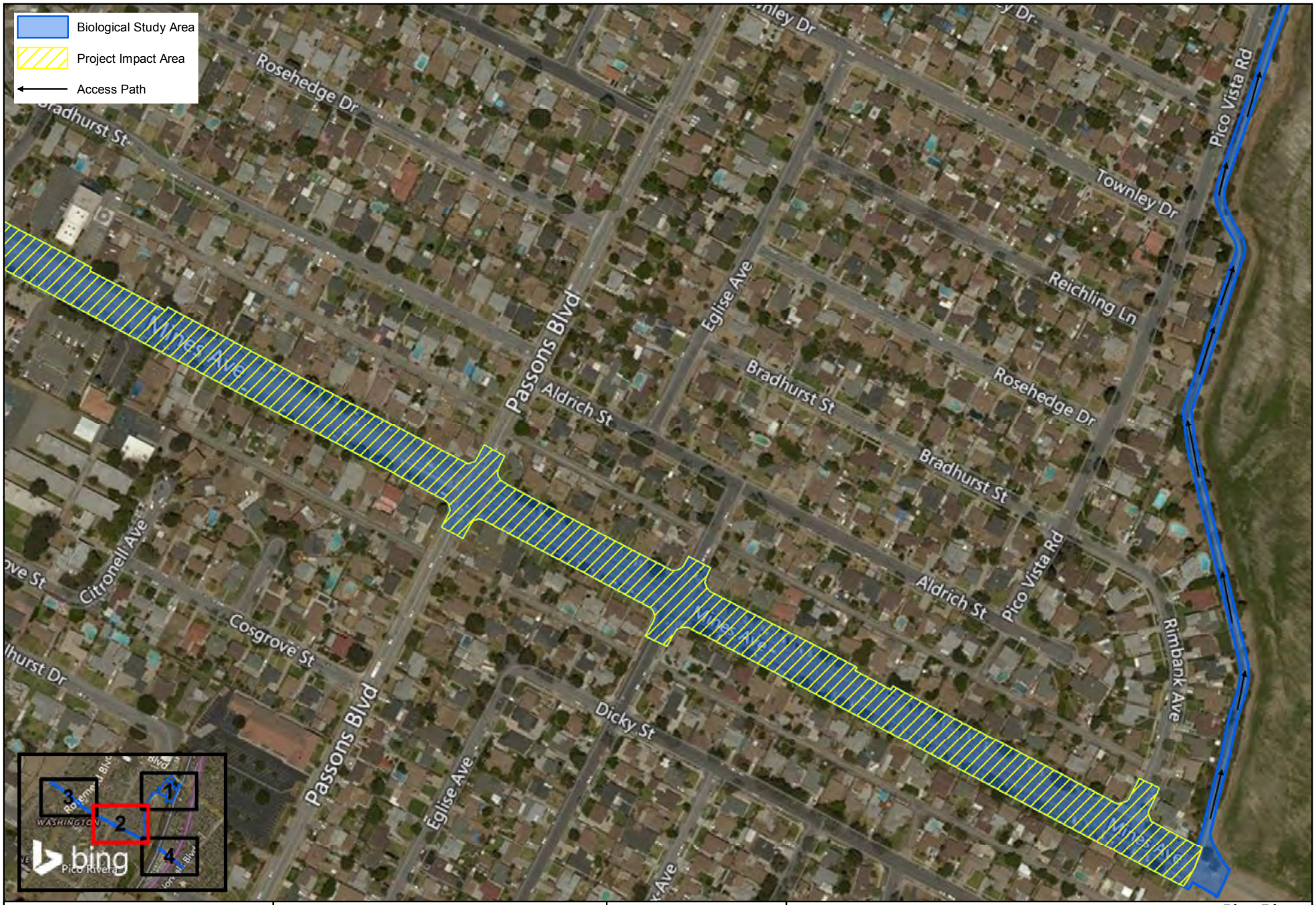
0 300 600 Feet

Data Source: BING, Kidd
City of Pico Rivera, BFK, VCS

Figure 3

Pico Rivera
Regional Bikeway Bridge Project

Biological Study Area



Prepared By:

VCS Environmental

Map Created: April 2019

0 300 600 Feet

Data Source: BING, Kidd
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 3

Biological Study Area

Prepared By:

VCS Environmental

Map Created: April 2019

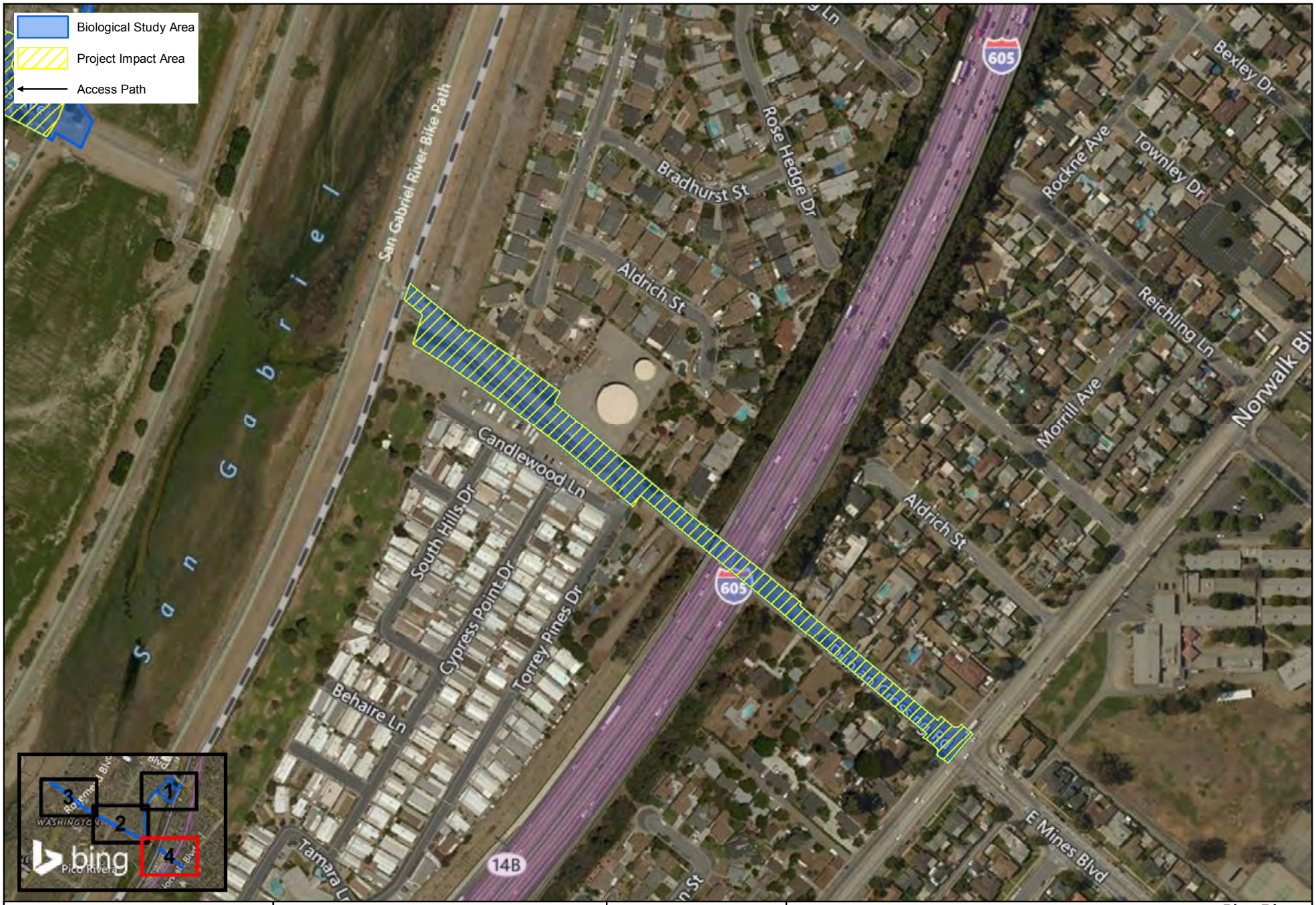
0 300 600 Feet

Data Source: BING, Kidd
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 3

Biological Study Area



Prepared By:

VCS Environmental

Map Created: April 2019

0 300 600 Feet

Data Source: BING, Kidd
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 3

Biological Study Area

Prepared By:

VCS Environmental

Map Created: April 2019

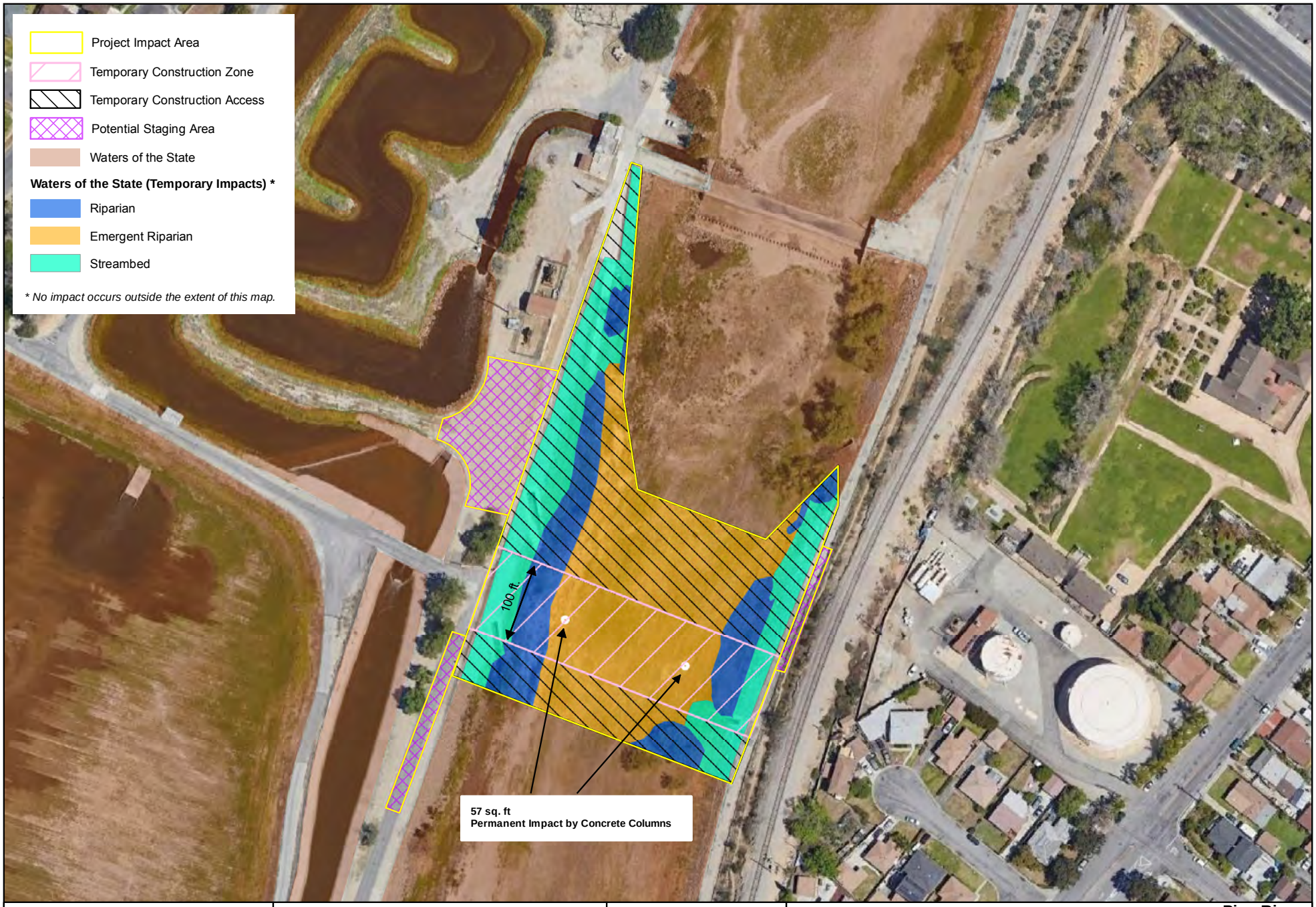
0 150 300 Feet

Data Source: Google Earth, BING, City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 4a

Waters of the U.S.



Prepared By:

VCS Environmental

Map Created: April 2019

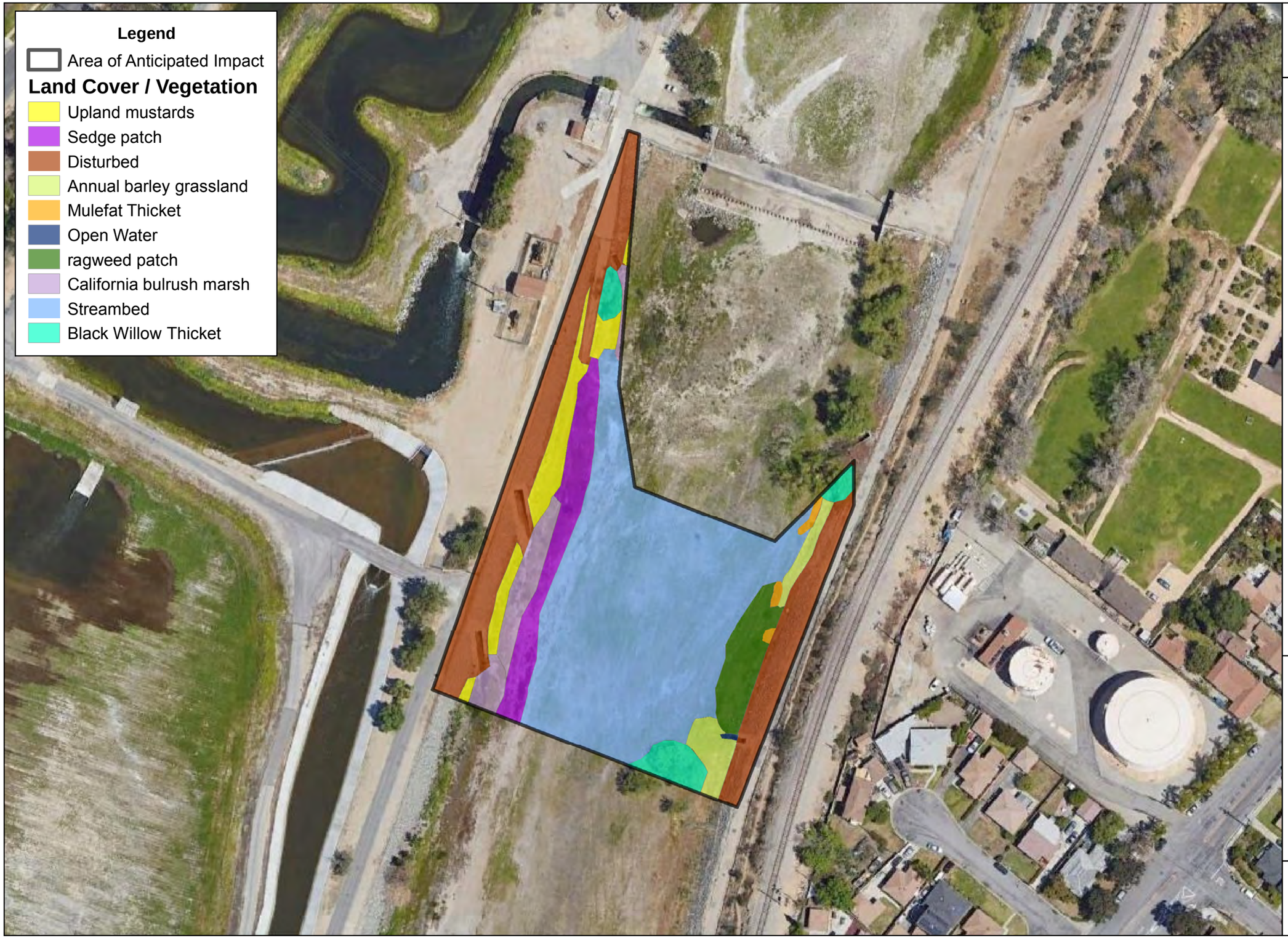
0 150 300 Feet

Data Source: Google Earth, BING, City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 4b

Waters of the State



Prepared By:

VCS Environmental

Pico Rivera Regional Bikeway Project

Vegetation Map

Figure 5

N

W E

S

0 100 200

Feet

Map Date: April 2019

Data Source: Google Earth, BING, City of Pico Rivera, BFK, VCS,

Prepared By:
VCS Environmental

Pico Rivera Regional Bikeway Project

Soils

Figure 5

N
W E
S

0 75 150
Feet

1 in = 80 ft

Map Date: April 2019

Data Source: WSS, BING, City of Pico Rivera, BFK, VCS,

Appendix A
Photopages

Photo 1: View of potential temporary construction access area for bridge construction within the San Gabriel River, facing south.

Photo 2: View of potential temporary construction access area within the San Gabriel River, facing northeast.

Photo 3: View of California bulrush (*Shoenoplectus californicus*) in the potential temporary construction access impact area within the San Gabriel River, facing southeast.

Photo 4: View of annual grasses in the potential construction zone/access impact area within the San Gabriel River, facing north.

Appendix B
Wetland Delineation Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Pico Rivera Regiona Bikeway City/County: Pico Rivera, LA County Sampling Date: 3/15/19

Applicant/Owner: City of Pico Rivera State: CA Sampling Point: 1

Investigator(s): Wade Caffrey Section, Township, Range: S18, T2S, R11W

Landform (hillslope, terrace, etc.): Riverbed Local relief (concave, convex, none): None Slope (%): Flat

Subregion (LRR): California Lat: 33.99407113 Long: -118.07344442 Datum: NAD 83

Soil Map Unit Name: CA 696 NWI classification: R4SBCx

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Wild radish (Raphanus sativus)	5		NI
2. Bermuda grass (Cynodon dactylon)	90	Y	FACU
3. Common sunflower (Helianthus annuus)	3		FAC
4. English plantain (Plantago lanceolata)	1		FAC
5. Stinging nettle (Urtica dioica)	1		FAC
6.			
7.			
8.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

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

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species _____	x 1 =	_____
FACW species _____	x 2 =	_____
FAC species 5	x 3 =	15
FACU species 90	x 4 =	360
UPL species _____	x 5 =	_____
Column Totals: 95 (A)		375 (B)

Prevalence Index = B/A = 3.95

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 ✓

Remarks:

SOIL

Sampling Point: 1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	4/2 10YR	100					S	Upper slopes

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

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

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: Pico Riveria Regional Bikeway City/County: Pico Rivera, LA County Sampling Date: 3/15/19

Applicant/Owner: City of Pico Rivera State: CA Sampling Point: 2

Investigator(s): Wade Caffrey Section, Township, Range: S18, T2S, R11W

Landform (hillslope, terrace, etc.): Riverbed Local relief (concave, convex, none): Concave Slope (%): Flat

Subregion (LRR): California Lat: 33.99388970 Long: -118.07346194 Datum: NAD 83

Soil Map Unit Name: CA 696 NWI classification: R4SBCx

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

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. California Club-Rush (Shoenoplectus californicu	40	Y	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	40 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 60 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ 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 _____

Remarks:

SOIL

Sampling Point: 2

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	4/10 B Gley	100					S	

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

Water Table Present? Yes ✓ No ___ Depth (inches): Surface

Saturation Present? (includes capillary fringe) Yes ✓ No ___ Depth (inches): Surface

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: Pico Rivera Regional Bikeway City/County: Pico Rivera, LA County Sampling Date: 3/15/19

Applicant/Owner: City of Pico Rivera State: CA Sampling Point: 3

Investigator(s): Wade Caffrey Section, Township, Range: S18, T2S, R11W

Landform (hillslope, terrace, etc.): Riverbed Local relief (concave, convex, none): None Slope (%): Flat

Subregion (LRR): California Lat: 33.99381930 Long: -118.07313161 Datum: NAD 83

Soil Map Unit Name: CA 696 NWI classification: R4SBCx

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

Remarks:

Center of drainage, recent sediment deposit / active floodplain

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Bermuda grass (Cynodon dactylon)	5		FACU
2. Common sunflower (Helianthus annuus)	10	Y	FAC
3. swamp smartweed(Persicaria hydropiperoides)	15	Y	OBL
4.			
5.			
6.			
7.			
8.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 70 % Cover of Biotic Crust _____

Dominance Test worksheet:

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

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

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ 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 _____

Remarks:

Mostly dead vegetation

SOIL

Sampling Point: 3

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-18	5/4 10 YR	100					S	Floodplain- active

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No _____

Remarks:

Any area with hydrophytic vegetation and wetland hydrology in the active floodplain would be a wetland, and this is an active floodplain.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

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

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: Pico Rivera Regional Bikeway City/County: Pico Rivera, LA County Sampling Date: 3/15/19

Applicant/Owner: City of Pico Rivera State: CA Sampling Point: 4

Investigator(s): Wade Caffrey Section, Township, Range: S18, T2S, R11W

Landform (hillslope, terrace, etc.): Riverbed Local relief (concave, convex, none): None Slope (%): Flat

Subregion (LRR): California Lat: 33.99306744 Long: -118.07323689 Datum: NAD 83

Soil Map Unit Name: CA 696 NWI classification: R4SBCx

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

Remarks:

Active floodplain

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Swamp smartweed(Persicaria hydropiperoides)	80	Y	OBL
2. Weakleaf bur ragweed (Ambrosia confertiflora)	10		NI
3. Rough Cocklebur (Xanthium strumarium)	10		FAC
4.			
5.			
6.			
7.			
8.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 20 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

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

Prevalence Index worksheet:

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

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ 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 _____

Remarks:

dead/re-sprouting/emergent

SOIL

Sampling Point: 4

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	3/5 B6 Gley	100					CL	Floodplain
8-16	6/2 7.5 YR	100					S	Floodplain

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

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

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

Indicators for Problematic Hydric Soils[3]:

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

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

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

Any area with hydrophytic vegetation and wetland hydrology in the active floodplain would be a wetland, and this is an active floodplain.

HYDROLOGY

Wetland Hydrology Indicators:

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

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

Secondary Indicators (2 or more required)

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

Field Observations:

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

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

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

Wetland Hydrology Present? Yes ✓ No ___

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

Remarks:

Appendix C – Focused Rare Plant Survey Report

April 29, 2019

Erin Hayes
Director, Biological Services
VCS Environmental
30900 Rancho Viejo Road, Suite 100
San Juan Capistrano, CA 92675

Subject: Draft Results of an Early-Season Sensitive Plant survey on the Pico Rivera Regional Bikeway Bridge Project.

Dear Ms. Hayes,

The following letter report presents the results of a special status plant survey on the proposed Pico River bikeway bridge project in the City of Pico Rivera.

Project Description

The Proposed Project would be implemented within the City of Pico Rivera and involves the construction of a Class 4 Bikeway and associated road improvements to Mines Avenue, construction of a bicycle/pedestrian bridge over the San Gabriel River, reconstruction of Dunlap Crossing Road and restriping of Class 2 Bikeway and reconstruction of the Dunlap Crossing Class 1 Bikeway. The total area of the project within undeveloped lands is approximately 12 acres (Figure 3), however approximately 38 acres were surveyed as part of the assessment for rare and sensitive plants.

In addition to the project footprint, other areas inspected included a proposed staging area. The staging area is between the northernmost spreading basin and the river bottom. It is mostly bare ground but has a few remnant plantings and weeds. There is no native habitat left. This is where the heavy equipment used by the L.A. Department of Public Works is parked within a chain link enclosure and two locked gates.

Project Location

The site is located in the City of Pico Rivera in southeastern Los Angeles County, California. The City of Pico Rivera is located on the southern edge of the San Gabriel Valley in southeastern Los Angeles County, approximately ten miles southeast of downtown Los Angeles (See Figure 1). Pico Rivera is situated north of the Interstate 5 freeway (I-5) and west of the Interstate 605 freeway (I-605). The site surveyed is part of the San Gabriel Coastal Spreading Grounds. It is south of Whittier Blvd, north of Washington Blvd, east of the 605 Freeway and west of Pico Vista Road. The area of interest is a paved bike path on berms that flank the percolation basin and cross it.

Ecologically, the site is located in a narrow area of land between Rio Hondo River and San Gabriel River in the San Gabriel Valley, south of the San Gabriel Mountains and northwest of Chino Hills State Park. This site is 20 miles east of Pacific Ocean and 3 miles west of Whittier Narrows Regional Park in the Los Angeles Plains ecoregion at an elevation of 160 feet above mean sea level (~50 meters). The project location can also be described as being located in an unsectioned portion of Township 2 South, Range 11 West of the Whittier, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map (see figure 2).

Previous Studies

The entire project site has been previously disturbed by development for transportation as well as flood control activities. Weed abatement and flood control maintenance are conducted annually, however no previous studies for this project re known to have been conducted. Programmatic surveys of the San Gabriel River have been performed in the past as well as associated with other projects, however copies of these documents were not available for review. A general biological survey was conducted prior to the botanical survey in March 2019 by VCS. This study generally mapped and described the plant communities on the project site and identified jurisdictional waters. The general biological survey did not include a focused rare plant study.

METHODS

Literature Review

A review of the existing literature was conducted to determine any descriptions of existing habitats within the study and the potential presence of any special status plant and animal species or plant communities. The sources reviewed for this study included:

- CNDDB Rarefind database of special status species and habitats for the Whittier, El Monte, La Habra, South Gate and Los Alamitos, CA 7.5' quadrangles (CNDDB 2019a);
- CNPS Rare Plant Inventory for the Whittier, El Monte, La Habra, South Gate and Los Alamitos 7.5' quadrangles (CNPS 2019);
- Documented plant collections from the Consortium of California Herbaria for the area (Consortium 2019);
- Detailed information on listed plant species known from the study area (O'Brien 2007);
- San Gabriel River Corridor Master Plan- Final Program Environmental Impact Report (County of Los Angeles Department of Public Works, 2006);
- Biological Studies in the study area (VCS 2019);
- A review of aerial photos of the project site (Google Earth 2018);
- Information on precipitation during 2018-2019 (Los Angeles Almanac 2019) and;
- NRCS (2019) soil map of the project site and associated project areas.

Field Surveys

A field survey of the project site was performed by Teresa B. Salvato, botanist on 23 April 2019. for approximately 7 hours. Methods followed the California department of Fish and Wildlife's Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Senstiive Natural

Communities (2018). The surveys examined the project area by walking through the various habitats and noting all of the plant species observed during the site examination (see Appendix A). Field notes were taken to record these observations, and photos were used to document the current conditions on the site at the time of the survey. A GPS receiver was used to maintain a track log of the areas covered during the survey and waypoint any unique features found at these localities.

The information collected on each special status plant locality included: the UTM coordinate of the locality, total number of plants observed, phenology of these plants, the plant community and associated species at the specific locality of these plants. In addition, photos were taken of each of the sites where the species were found.

Scientific and common names generally follow the Vascular Plants of western Riverside County: An annotated checklist (Roberts et al. 2004, 2007), although some nomenclature from the Jepson Manual (Baldwin et al. 2012) and other botanical publications (Clarke et al. 2007) is followed. The names for the special status plant species follow the CNPS online Rare Plant Inventory (CNPS 2019).

EXISTING CONDITIONS

Soils

Soils onsite are mapped as Pits and Quarries and Xeropsamments (NRCS 2019). Xeropsamments are found in moist areas and consist of unconsolidated sand deposits. They are young soils that are high in mineral content and have no horizons. The psamment found in the San Gabriel River are derived from granite. The Pits and Quarries classification indicates areas that have been previously mined. In this case the area was likely mined for gravel or sand associated with the river.
It should be noted that soils maps found in the San Gabriel River Corridor Master Plan Final Program EIR (LADPW 2006) shows that the site is comprised of Hanford Gravelly Sandy Loam.

Precipitation

Rainfall totaled 17.99 inches for the 2018-2019 season (July-March) which was 4.3 inches above normal (LA Almanac 2019) with the average rainfall for this area being 14 inches. The rainfall pattern for 2017-2018 was very dry and may have limited the diversity of annual forbs and grasses seed bank, thus limiting this year's study, and potentially some of the bulb-corm forming species found in the study area could have died off from the past season's drought.

Plant Communities

The entire site is heavily disturbed and some areas are already developed with paved paths and flood control facilities. The majority of species detected were non-native. It was noted during the survey that many of the native species in the survey area appeared to have been planted as part of a restoration effort. Because these species are not part of an existing natural plant community, they are described as "Landscaping". The following section describes the plant communities observed on the project site. The list of all of the plant species noted during the field surveys is found in Appendix A.

Landscaping

Portions of the survey area contain both native and non-native planted species that are used for landscaping. Many of the native species are those commonly associated with coastal sage scrub and chaparral plant communities. Dominant plants in these areas include California sagebrush (*Artemisia californica*), western sycamore (*Platanus racemosa*), sugarbush (*Rhus ovata*), Madrone (*Arbutus unedo*), Desert willow (*Chilopsis linearis*), purple sage (*Salvia leucophyllya*), San Diego marsh elder (*Iva hayesiana*), and coast live oak (*Quercus agrifolia*).

Disturbed Riparian

Within the main channel of the San Gabriel River a pockets of Riparian habitat. The habitat is disturbed from weed abatement, flood control and human recreation activities. Dominant plants in these area include blue elderberry (*Sambucus nigra*), black willow (*Salix gooddingi*), western marsh cudweed (*Gnaphalium palustre*), garland daisy (*Glebionis coronaria*), short pod mustard (*Hirschfeldia incana*), heliotrope (*Heliotropium curassavicum),* seep monkeyflower *(Mimulus guttatus)*, deergrass (*Muhlenbergia rigens),* shining pepperweed *(Lepidium latifolium)* and cocklebur (*Xanthium strumarium*).

Ruderal

The margins along the existing bike paths and roads as well as the flood control areas (spreading grounds) contain a ruderal plant community that is consistent with the disturbed nature of these localities. Common grasses in these areas include cheat grass (*Bromus tectorum*), schismus (*Schismus barbatus*), foxtail barley, slender wild oat (*Avena barbata*), and ripgut brome. Forbs in this community consists of shortpod mustard, lamb's quarters (*Chenopodum album*), (*Pseudognaphalium californicus*) annual sunflower (*Helianthus annuus*), ragweed (*Ambrosia* sp.), prickly lettuce (*Lactuca serriola*), Russian thistle (*Salsola tragus*), annual bur weed (*Ambrosia acanthicarpa*), jimson weed (*Datura wrightii*), red-stemmed filaree (*Erodium cicutarium*), castor bean (*Ricinis communis*) and cheeseweed (*Malva parviflora*).
Within these areas are some remnant species or re-established species. These include black sage (*Salvia melifera*), sugarbush(*Rhamnus californica*) and small-flowered nightshade (*Solanum americanum)*

SPECIAL STATUS PLANT SPECIES

Special status plant species include those plants listed by the state or federal governments as endangered, threatened or rare and species or those that are candidates for future listing. It also encompasses the species determined by the California Department of Fish and Wildlife (CDFW) to meet the CEQA (Section

15380) criteria as "rare and endangered", even though they have not been officially listed by any agency (CNDDB 2019a). Finally, the list considers those species noted by the California Native Plant Society (CNPS 2019). The species of special interest were first determined using the CNDDB list of special plant species (CNDDB 2019b) and the CNPS rare plant inventory (CNPS 2019). Other sources included the Consortium of California herbaria (Consortium 2018) and the vascular plant checklist for western Riverside County (Roberts et al. 2004, 2007). Recent taxonomic and status information on some of these species was also reviewed (Smith 1980).

CNDDB (CDFW 2019a) element reports were then developed for the USGS 7.5' Whittier, El Monte, Los Alamitos, South Gate, and La Habra quadrangles, to provide the known locations of species/communities of special concern in the general region and Bios mapping of this data.
The plant species of concern potentially occurring in the project vicinity are found in Table 1 and those species known to occur in the general region, but *not* anticipated in the study area are shown in Table 2. The following section describes those species potentially occurring in the vicinity of the Pico Rivera Bike Path project site.

TABLE 1 – Sensitive Plant Species Potentially Occurring on the Site

Species		**Status**			**Bloom Period**	**Habitat Requirements**	**Comments**
Scientific Name	**Common Name**	**FWS**	**DFW**	**CNPS**			
Calochortus weedii var. intermedius	intermediate mariposa lily	None	None	1B.2	May-Jul	Rocky, calcareous Chaparral, Coastal scrub, Valley/ foothill grassland	Is tolerant of many habitat types.
Calystegia felix	lucky morning-glory	None	None	1B.1	Mar-Sep	Meadows and seeps (sometimes alkaline), Riparian scrub (alluvial)	Known from Chino Hills, marginal habitat on site.
Centromadia parryi ssp. australis	southern tarplant	None	None	1B.1	May-Nov	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools	Reasonable potential in less disturbed parts of survey area
Convolvulus simulans	small-flowered morning-glory	None	None	4.2	Mar-Jul	Open chaparral, Coastal scrub, Valley/ foothill grassland within clay, serpentinite seeps	Reasonable potential in less disturbed parts of survey area
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	None	None	2B.2	Jul-Oct	Freshwater marshes and swamps	Has potential. Needs surveys later in season to identify
Symphyotrichum defoliatum	San Bernardino aster	None	None	1B.2	Jul-Nov	Near ditches, streams, meadows, seeps, marshes & vernally mesic Valley/ foothill	Has marginal potential. Needs late season survey in order to identify.

						grassland & other habitats	

U.S. Fish and Wildlife Service FT- Federal Threatened FE- Federally Endangered	**California Department of Fish and Game** SE- State Endangered ST-State Threatened

California Native Plant Society Rare Plant Rankings

1B Plants rare, threatened, or endangered in California and elsewhere

2B Plants rare, threatened or endangered in California but more common elsewhere.

3 Plants which more information is needed - A review list

4 Plants of limited distribution (a watch list)

.1 Seriously threatened in California (> 80% of occurrences threatened)

.2 Moderately threatened in California (20-80% occurrences threatened / moderate threat)

.3 Not very threatened in California (< 20% of occurrences threatened / low threat or no current threats known)

Table 2. Sensitive Plant Species Known in Area, but NOT Anticipated in the Project Site

Species		**Status**			**Blooming Period**	**Habitat Requirements**	**Comments**
Scientific Name	**Common Name**	**FWS**	**DFW**	**CNPS**			
Calochortus catalinae	Catalina mariposa lily	None	None	4.2	Mar-Jun	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland	This coastal species is not known to occur inland.
Calochortus plummerae	Plummer's mariposa lily	FT	None	4.2	May-Jul	Granitic, rocky alluvial habitats with Chaparral, Valley and foothill grassland	No suitable soils, may be outside elevation
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	FE	SE	1B.2	May-Oct	Coastal dunes, Marshes and swamps (coastal salt)	Requires saltwater marsh habitat.
Dudleya multicaulis	many-stemmed dudleya	None	None	1B.2	Apr-Jul	Chaparral, Coastal scrub, Valley and foothill grassland, often in clay	Soils are too silty and sandy to support this species
Horkelia cuneata var. puberula	mesa horkelia	None	None	1B.1	Feb-Jul	Sandy or gravelly sites in maritime Chaparral, Cismontane woodland, Coastal scrub	Site is below Elevational requirements for this species
Juglans californica	Southern California black walnut	None	None	4.2	N/A	Alluvial areas in various woodland and shrub habitat	Would have been observed
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None	None	1B.1	Feb-Jun	Marshes and swamps (coastal	No suitable habitat or soils

						salt), Playas, Vernal pools	to support this species.
Navarretia prostrata	prostrate vernal pool navarretia	None	None	1B.1	Apr-Jul	Alkaline Mesic areas in Coastal scrub, Meadows, seeps, Valley/ foothill grassland, Vernal pools	No suitable habitat or soils to support this species.
Orcuttia californica	California Orcutt grass	FE	SE	1B.1	Apr-Aug	Vernal pools	No suitable habitat or soils to support this species.
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	None	None	3.2	Mar-Aug	sandy, sometimes rocky areas in Chaparral, Coastal dunes, Coastal scrub, coastal Marshes and swamps	No phacelias observed
Phacelia stellaris	Brand's star phacelia	None	None	1B.1	Mar-Jun	Coastal dunes, Coastal scrub	No sandy bars where this species would occur
Quercus engelmannii	Engelmann oak	None	None	4.2	N/A	Chaparral, Cismontane & Riparian woodland, Valley/foothill grassland	Not observed
Ribes divaricatum var. parishii	Parish's gooseberry	None	None	1A	Feb-Apr	Riparian woodlands	Last known plants obs in 1980 in Whittier narrows. Would have been conspicuous during survey
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	None	None	1B.2	Jun-Aug	mesic areas in Chaparral, Cismontane woodland, Lower coniferous forest	No suitable habitat or soils to support this species.
Sidalcea neomexicana	salt spring checkerbloo m	None	None	2B.2	Mar-Jun	Alkaline, mesic sites in Chaparral, Coastal scrub, Lower coniferous forest, Mojavean desert scrub, Playas	Not observed. Conspicuous species would have been detected.

Suaeda esteroa	estuary seablite	None	None	1B.2	May-Oct	Marshes and swamps (coastal salt)	No habitat on site

U.S. Fish and Wildlife Service FT- Federal Threatened FE- Federally Endangered	**California Department of Fish and Game** SE- State Endangered ST-State Threatened

California Native Plant Society Rare Plant Rankings

1A Plants are presumed extirpated in California and are rare or extinct elsewhere
1B Plants rare, threatened, or endangered in California and elsewhere
2B Plants rare, threatened or endangered in California but more common elsewhere.
3 Plants which more information is needed - A review list
4 Plants of limited distribution (a watch list)
.1 Seriously threatened in California (> 80% of occurrences threatened)
.2 Moderately threatened in California (20-80% occurrences threatened / moderate threat)
.3 Not very threatened in California (< 20% of occurrences threatened / low threat or no current threats known)

RESULTS

The field examinations of the project site during of April of 2019, located one locality of the San Diego Marsh Elder (*Iva hayesiana*), which comprised of a single large plant. The CNPS gives this plant a rare plant rank of 2B.2. I is nost commonly found in San Diego County and south Orange County, with only two other observations in Los Angels County. This plant is located on the berm of the spreading grounds and appears to possibly have been planted as this species is often sold for ground cover and slope stabilization as it is fast spreading and aromatic.

The survey also found Lewis's evening primrose (*Cammisoniopsis lewisii*) in two locations within the survey area. The CNPS gives this plant a rare plant rank of 3 (review list). It has not been reported in the area, however this species is likley often overlooked as it is similar in appearance to other primroses. At his time more information is needed on the abundance and range of the species. In the future this spcies may be down listed to rare plant ranking of 4 (watch lsit).
The first location found only a single plant near the bike path's intersection with Glencannon Drive. This individual was not blooming. The second location consisted of a small patch of approximatley 15-20 individuals on the east-facing berm of the bike pach between Loch Lomond Drive and Havenwood Street. Some of these were mature enough to identify to species.

Neither of these species are exceptionally rare plants. In the case of the marsh elder, it was likely planted from nursery stock. It is not likely to be impacted by the project, however the on going flood control activities could affect this one plant. If this is indeed nursury stock, the genetic diversity of the population as a whole will not be affected by the loss of this species. The rarity of the evening primrose is under review. It is not known how the loss of these plant could affect the viabiity of thisspecies, however due to on-going flood control, competition with non-native plants and weed abatement activities, it is unlikley this particular population will persist without intervtion. It is assumed that there are other populations of this plant within the San Gabriel River and the loss of these individuals will liekly not drive the entire species towards becoming endangered. The proposed project is unlikley to directly impact either of the two locations of the species.

Table 3 notes the locality, number of plants observed, along with the plant communities and associated plant species for each locality. Figure 3 provides a map of these localities on a Google Earth aerial photograph.

Table 3. Sensitive Plant Species Locations in Project Area

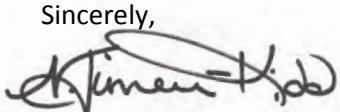
Species	UTM Easting	UTM Northing	#	Plant Community	Associated Species
San Diego Marsh-elder (*Iva hayesiana*)	400712	3761831	1	Ruderal	Non-native grasses. Appeared to have been planted at the site.
Lewis's evening primrose (*Camissoniopsis lewisii*)	400670	3762041	1	Landscaped	Various tree species
Lewis's evening primrose (*Camissoniopsis lewisii*)	400489	3761832	~15	Ruderal	Non-native grasses

RECOMMENDATIONS

It is recommended that a late-spring survey be conducted in late-May or early June to ensure no other rare plant species have emerged. Species that would not have been identifiable during the early season but could be identified during a late survey include intermediate mariposa lily, lucky morning-glory, southern tarplant, small-flowered morning-glory, Peruvian dodder, and San Bernardino aster.

Should you have any questions regarding this report, please do not hesitate to contact me at (949) 632-2756.

Sincerely,



Nina Jimerson-Kidd
Wildlife biologist

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ATTACHEMNT A: FLORAL COMPENDIUM

Common Name	***Scientific Name***	**Habit**	**Comments**
*Aleppo pine	*Pinus halepensis*	tree	planted
Blue elderberry	*Sambucus nigra L. ssp. caerulea (Raf.) R. Bolli*	tree	
*Tumbleweed	*Amaranthus albus L.*	annual	
*Smooth Pigweed	*Amaranthus hybridus L. ?*	annual	
Sugarbush	*Rhus ovata*	Shrub	
*Poison hemlock	*Conium maculatum L.*	annual	
Annual bursage	*Ambrosia acanthicarpa Hook.*	annual	
Weakleaf bur ragweed	*Ambrosia confertiflora*	Perennial	
California sagebrush	*Artemisia californica Less.*	shrub	
mulefat	*Baccharis salicifolia (Ruiz & Pavón) Pers.*	shrub	
*Crowndaisy	*Chrysanthemum coronarium L. (aka Glebionis coronaria)*	annual	
*Australian cotula	*Cotula australis (Sieber) Hook. f.*	annual	
Western marsh cudweed	*Gnaphalium palustre Nutt.*	annual	
*Annual sunflower	*Helianthus annuus L.*	annual	
§San Diego Marsh Elder	*Iva hayesiana A. Gray*	shrub	planted
*Prickly lettuce	*Lactuca serriola L.*	annual	
Pineapple weed	*Matricaria discoidea DC.*	annual	
*Stinknet	*Oncosiphon piluliferum (L.f.) Källersjö*	annual	
*Bristly ox-toungue	*Picris (Helminthotheca) echioides L.*	biennial	
California cudweed	*Pseudognaphalium californicum (DC.) A. Anderb.*	biennial	
Cotton-batting plant	*Pseudognaphalium stramineum (Kunth) W.A. Weber*	annual	

*False fleabane	*Pulicaria paludosa Link*	perennial	
*Common groundsel	*Senecio vulgaris L.*	annual	
*Common sow thistle	*Sonchus oleraceus L.*	annual	
Cocklebur	*Xanthium strumarium L.*	annual	
Desert willow	*Chilopsis linearis (Cav.) Sweet*	Tree	Planted
Alkali heliotrope	*Heliotropium curassavicum L.*	perennial	
*Shortpod mustard	*Hirschfeldia inacana (Brassica geniculate) (Desf.) Ball*	annual/perennial	
*Lesser wortcress	*Lepidium didymium (Coronopus didymus) (L.) Sm.*	annual	
*Perennial pepperweed	*Lepidium latifolium L.*	perennial	
*Radish	*Raphanus sativus L.*	annual	
*London rocket	*Sisymbrium irio L.*	annual	
*Red sand-spurrey	*Spergularia rubra (L.) J. Presl. & C. Presl.*	annual	
*Lamb's quarters	*Chenopodium album L.*	annual	
*Pigweed	*Chenopodium murale L.*	perennial	
* Russian thistle	*Salsola tragus L.*	annual	
*Gum cistus	*Cistus ladanifer L.*	shrub	planted
Pygmy-weed	*Crassula connata (R. & P.) Berger*	annual	
* Madrone sp.	*Arbutus unedo L. ?*	arborescent shrub	planted
*spotted spurge	*Euphorbia maculata L.*	annual	
* Castor bean	*Ricinus communis L.*	shrub	
*bur clover	*Medicago polymorpha* L.	annual	
*white sweet clover	*Melilotus albus Medikus*	annual	
*sour clover	*Melilotus indicus (L.) All.*	annual	
Coast live oak	*Quercus agrifolia Née*	tree	planted
*Red-stemmed fillaree	*Erodium cicutarium (L.) L'Her. ex Ait.*	annual	

Carolina crane-bill	*Geranium carolinianum L.*	annual	
*Sweetgum tree	*Liquidambar styraciflua L.*	tree	planted
*Rosemary	*Rosmarinus officinalis L.*	shrub	
Purple sage	*Salvia leucophylla Greene*	shrub	planted
White sage	*Salvia apiana*	Shrub	
Black sage	*Salvia melifera*	shrub	
*Hyssop loosestrife	*Lythrum hyssopifolia L.*	annual	
*cheeseweed	*Malva parviflora L.*	annual	
*Ficus	*Ficus nitida*	Tree	planted
*creeping myoporum	*Myoporum parvifolium R. Br.*	shrub	planted
*Brush box	*Lophostemon confertus*	Tree	planted
*Crimson bottlebush	*Melaleuca citrina (Curtis) Dum. Cours*	shrub	planted
*water gum	*Tristania sp.*	tree	planted
§ Lewis's evening primrose	*Camissoniopsis lewisii*	annual	Rare
Minature suncup	*Camissoniopsis (Camissonia) micrantha (Hornem. ex Spreng.)*	annual	
*cutleaf evening primrose	*Oenothera laciniata* Hill	annual/perennial	
*English plantain	*Plantago lanceolata L.*	perennial	
Western sycamore	*Platanus racemosa Nutt.*	tree	
* NCN marsh rosemary	*Limonium perezii F. T. Hubb.*	perennial	
Swamp smartweed	*Persicaria hydropiperoides* (Michx.)	perennial	
*Common knotweed	*Polygonum arenastrum Jord. ex Boreau*	annual	
False waterpepper	*Polygonum hydropiperoides Michx.*	perennial	
*Aegean dock	*Rumex denatus. ?*	perennial	
*Purslane	*Portulaca oleracea L.*	succulent annual	
Toyon	*Rhamnus californica* Eschsch.	shrub	planted
Catalina cherry	*Prunus lyonii (Eastw.) Sarg.*	shrub	planted

Fremont cottonwood	*Populus fremontii S. Wats.*	tree	planted
Goodding's black willow	*Salix gooddingii Ball*	tree	
*Soapberry	*Cupaniopsis anacardioides (A. Rich.) Radlk.*	tree	Planted
*golden rain tree	*Koelreuteria bipinnata Franchet*	tree	planted
Seep monkeyflower	*Erythranthe guttata (G.L. Nesom)(Mimulus guttatus DC.)*	perennial	
Purslane speedwell	*Veronica peregrina L.*	annual	
*Tree of heaven	*Ailanthus altissima (P. Mill.) Swingle*	tree	
*Jimson weed	*Datura stramonium L.*	annual	
Small-flowered nightshade	*Solanum americanum Miller*	annual	
*black nightshade	*Solanum nigrum L.*		
* Kurrajong	*Brachychiton populneum (Schott. & Endl.) R. Br. ?*	tree	Planted
*Chinese elm	*Ulmus parvifolia Jacq.*	Tree	
*dwarf nettle	*Urtica urens L.*	annual	
*	*Lantana montevidensis*	shrub	planted
California fan palm	*Washingtonia filifera (Lindl.) Wendl.*	tree	
Flat nutsedge	*Cyperus eragrostis Lam.*	perennial	
Southern bulrush	*Schoenoplectus californicus (C.A. Mey.) Palla*	Perennial	
*wild oat	*Avena barbata Brot.*	annual	
*NCN Brome	*Bromus catharticus Vahl*	perennial	
*Ripgut grass	*Bromus diandrus Roth*	annual	
*Bermuda grass	*Cynodon dactylon (L.) Pers.*	perennial	
*Panic veldt grass	*Ehrharta erecta Lam.*	perennial	
*Rye grass	*Festuca perennis (L.) Columbus & J.P. Sm.*	annual/perennial	
*Mediterranean barley	*Hordeum marinum Huds.*	annual	
*Wall barley	*Hordeum murinum L.*	annual	

Deer grass	*Muhlenbergia rigens (Benth.) A. Hitchc.*	perennial	
*Rabbitfoot grass	*Polypogon monspeliensis (L.) Desf.*	annual	
*Waterbeard grass	*Polypogon semiverticillatus (Forsk.) Hylander*	perennial	
*Mediteranian schismus	*Schismus barbatus (L.) Thell.*	annual	planted

* Non-native
§ Sensitive

ATTACHMENT B: MAPS

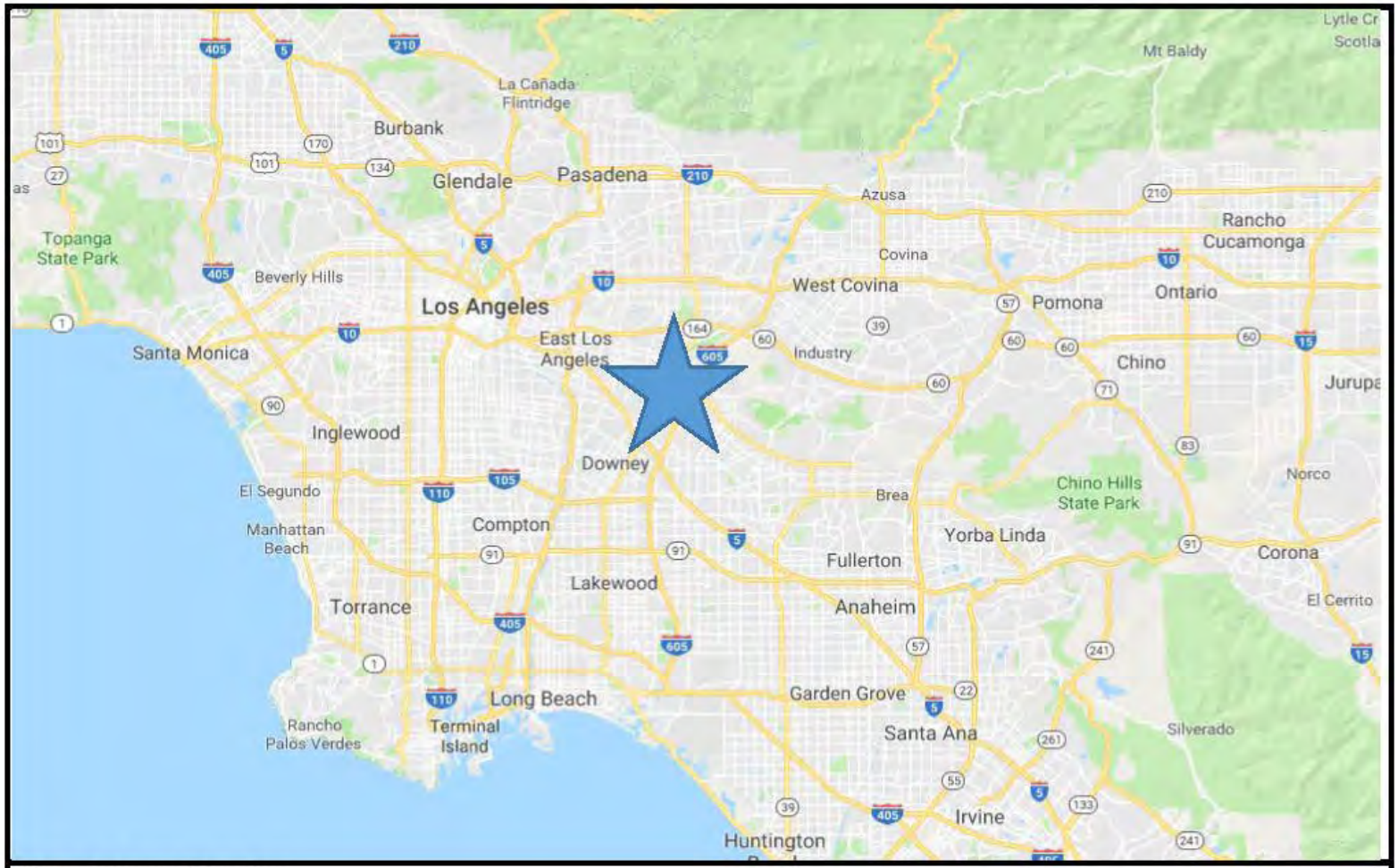


Figure 1. General Location
Google Maps 4/2019
Pico Rivera Regional Bikeway Bridge Project Early-Season Sensitive Plant survey

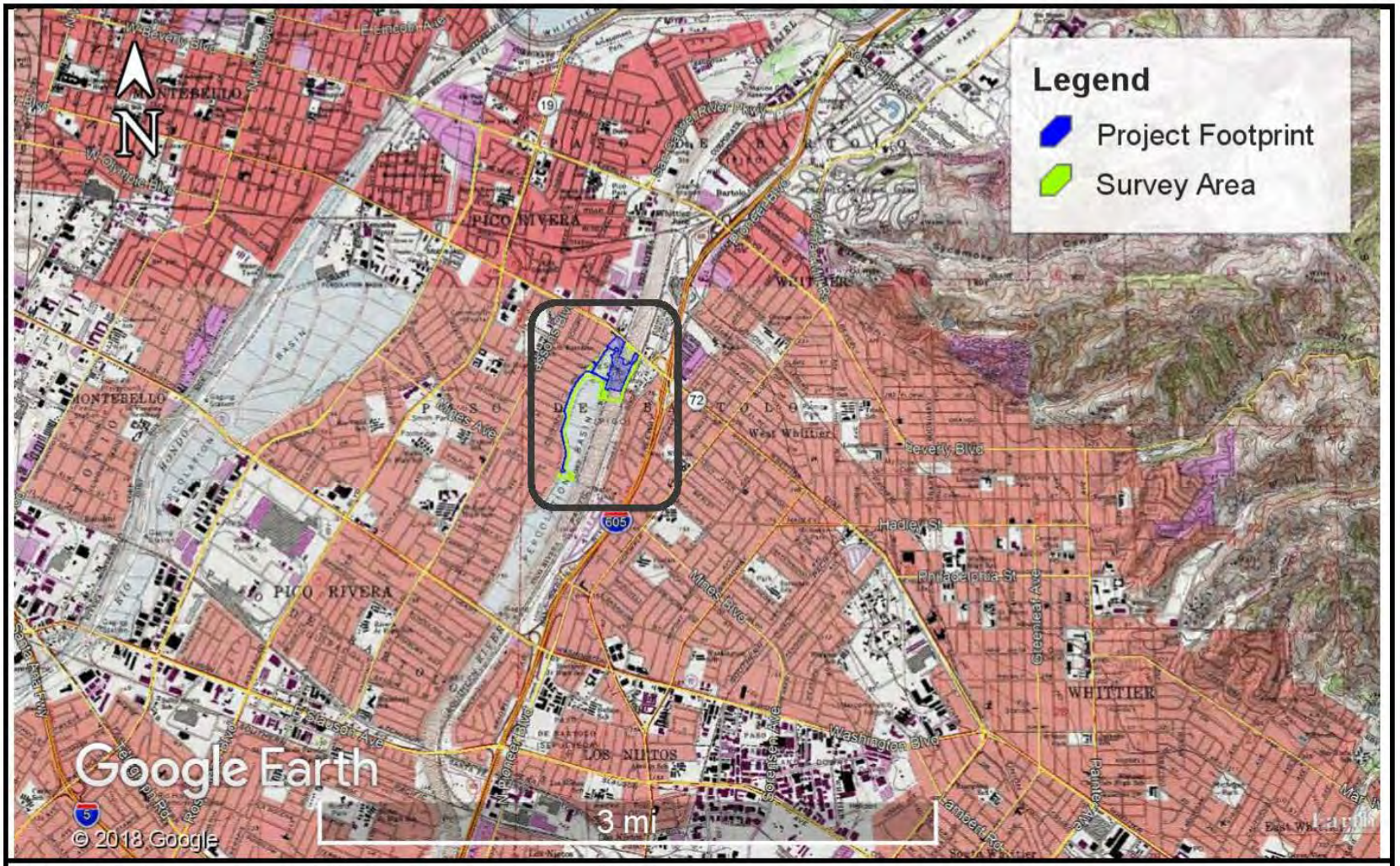


Figure 2. Project Location on Whittier, CA USGS Topographic Map

USGS Topographic Map 1988

Pico Rivera Regional Bikeway Bridge Project Early-Season Sensitive Plant survey

Kidd BIOLOGICAL INC.

Figure 3. Survey Area and Sensitive Species Locations

Google Earth 2019, Image date 3/28/2018

Pico Rivera Regional Bikeway Bridge Project Early-Season Sensitive Plant survey

Kidd BIOLOGICAL INC.

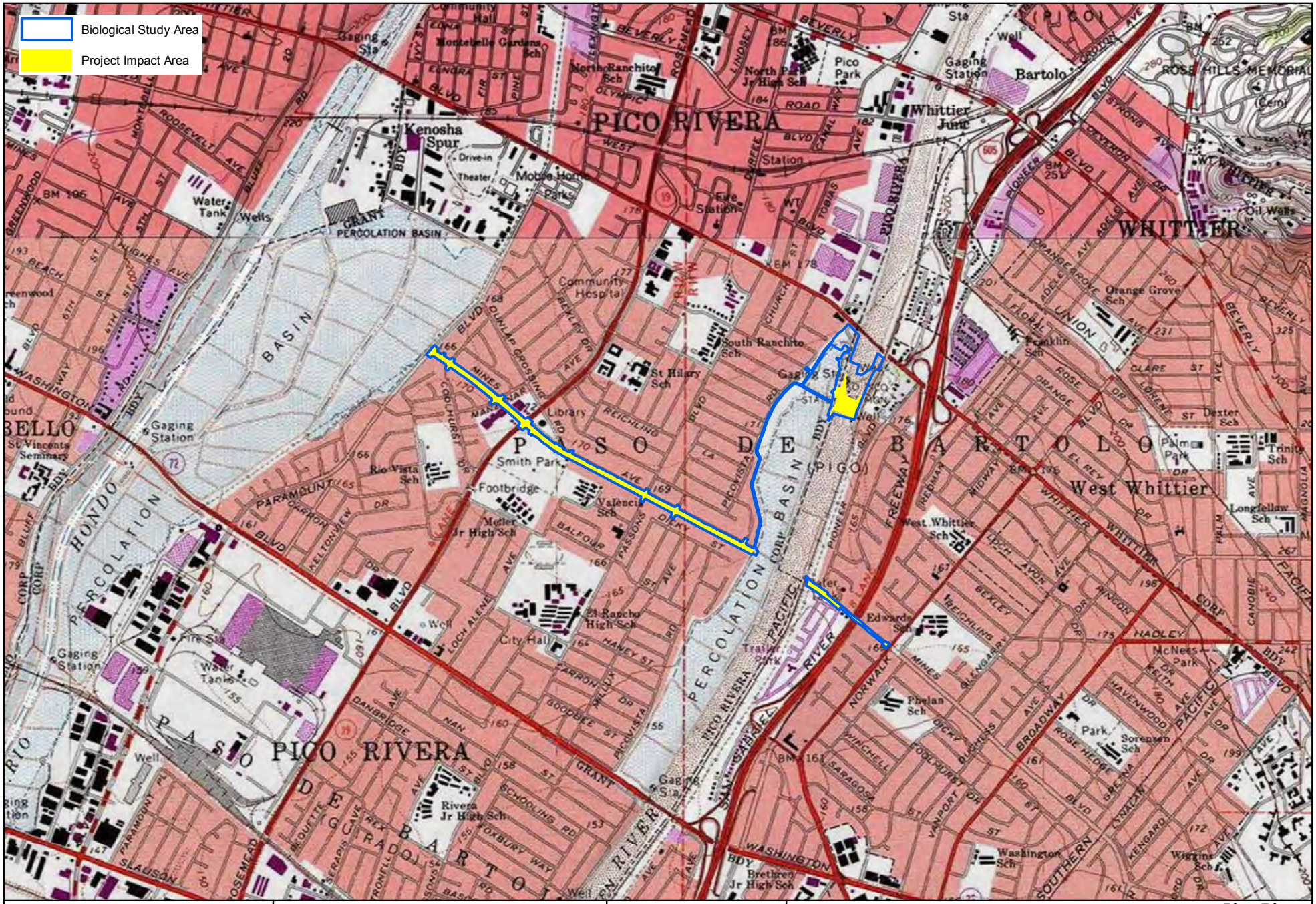
Photo 1.Proposed staging area

Photo 2. River bottom facing north from proposed staging area

	
Photo 3. River access ramp near staging area, looking south	Photo 4. Looking north at spreading grounds from bike path
	
Photo 5. View south of control basin near Glencannon Road	Photo 6. Flood control basin east of Pico Vista Road.

Appendix D – Project Maps

- Topographic Map
- Soil Map
- Vegetation Map
- Jurisdictional Delineation



Prepared By:

VCS Environmental

Map Created: April 2019

0 2,000 4,000 Feet

Data Source: BING, USGS
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 4

USGS Topo Map

Prepared By:

VCS Environmental

Map Created: April 2019

0 300 600 Feet

Data Source: BING, NRCS
City of Pico Rivera, BFK, VCS

Figure 5

Pico Rivera
Regional Bikeway Bridge Project

Soil

Prepared By:

VCS Environmental

Map Created: April 2019

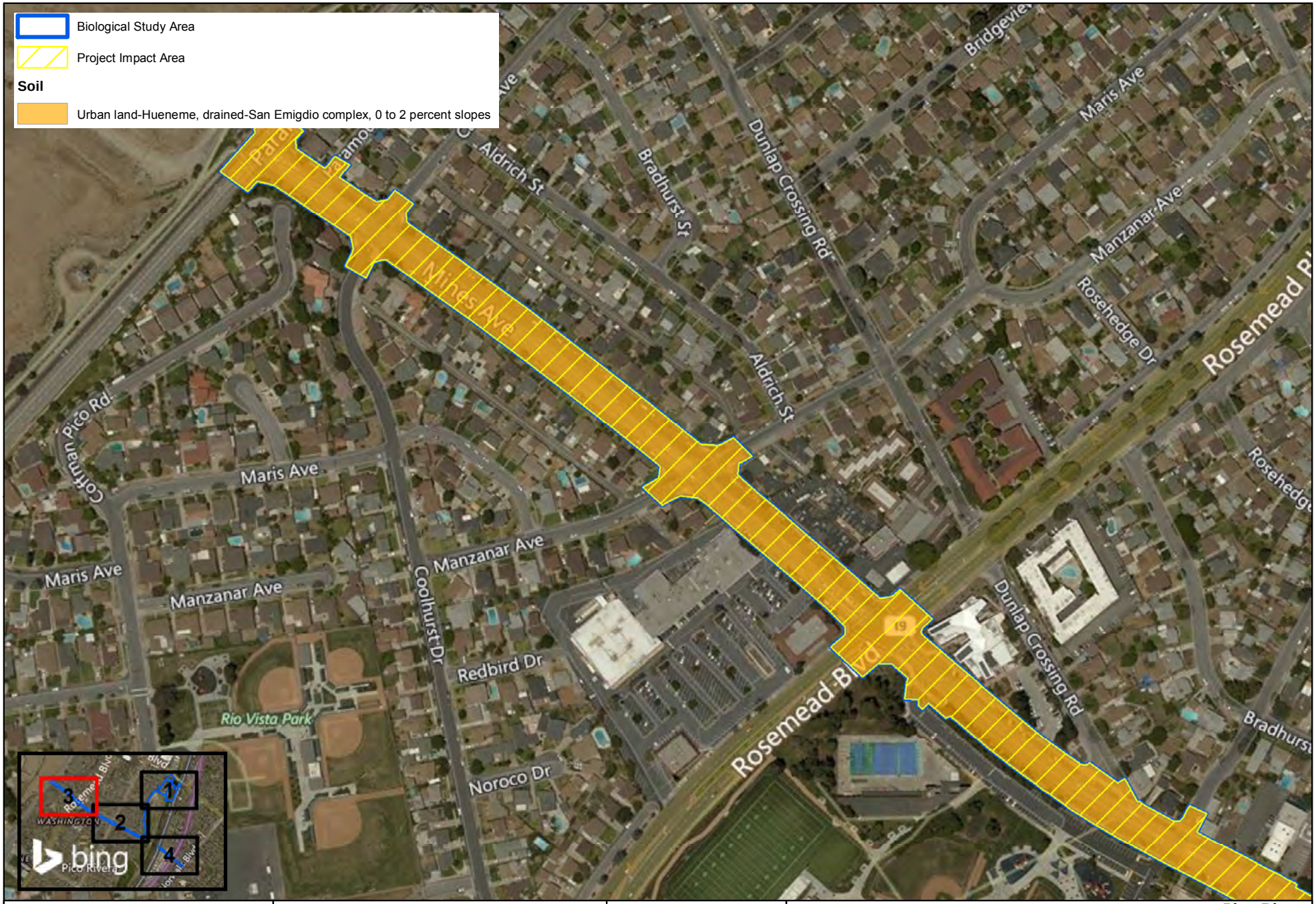
0 300 600 Feet

Data Source: BING, NRCS
City of Pico Rivera, BFK, VCS

Figure 5

Pico Rivera
Regional Bikeway Bridge Project

Soil



Prepared By:

VCS Environmental

Map Created: April 2019

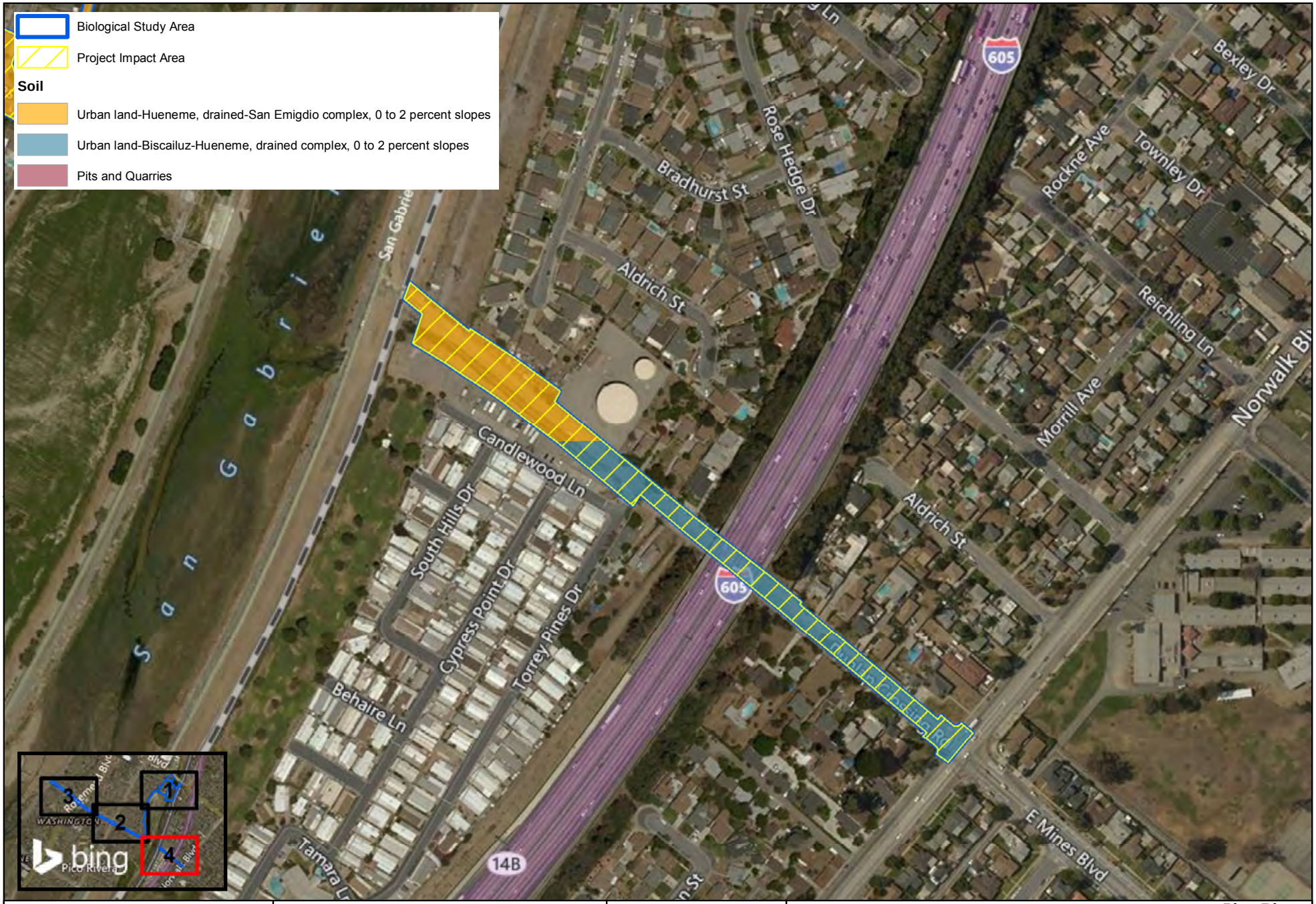
0 300 600 Feet

Data Source: BING, NRCS
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 5

Soil



Prepared By:

VCS Environmental

Map Created: April 2019

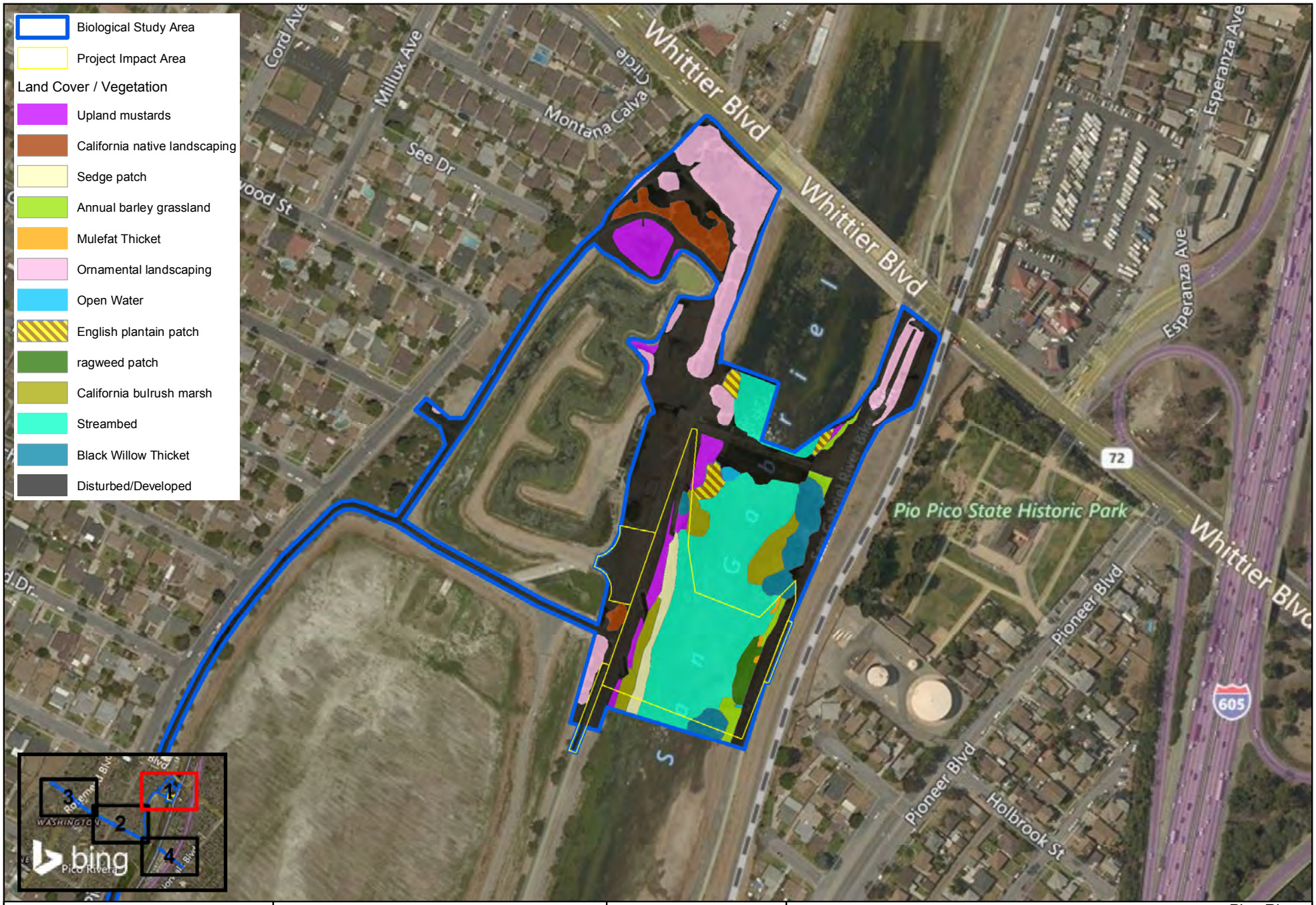
0 300 600 Feet

Data Source: BING, NRCS
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 5

Soil



Prepared By:

VCS Environmental

Map Created: April 2019

0 300 600 Feet

Data Source: BING
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 6

Vegetation/Land Cover

Prepared By:

VCS Environmental

Map Created: April 2019

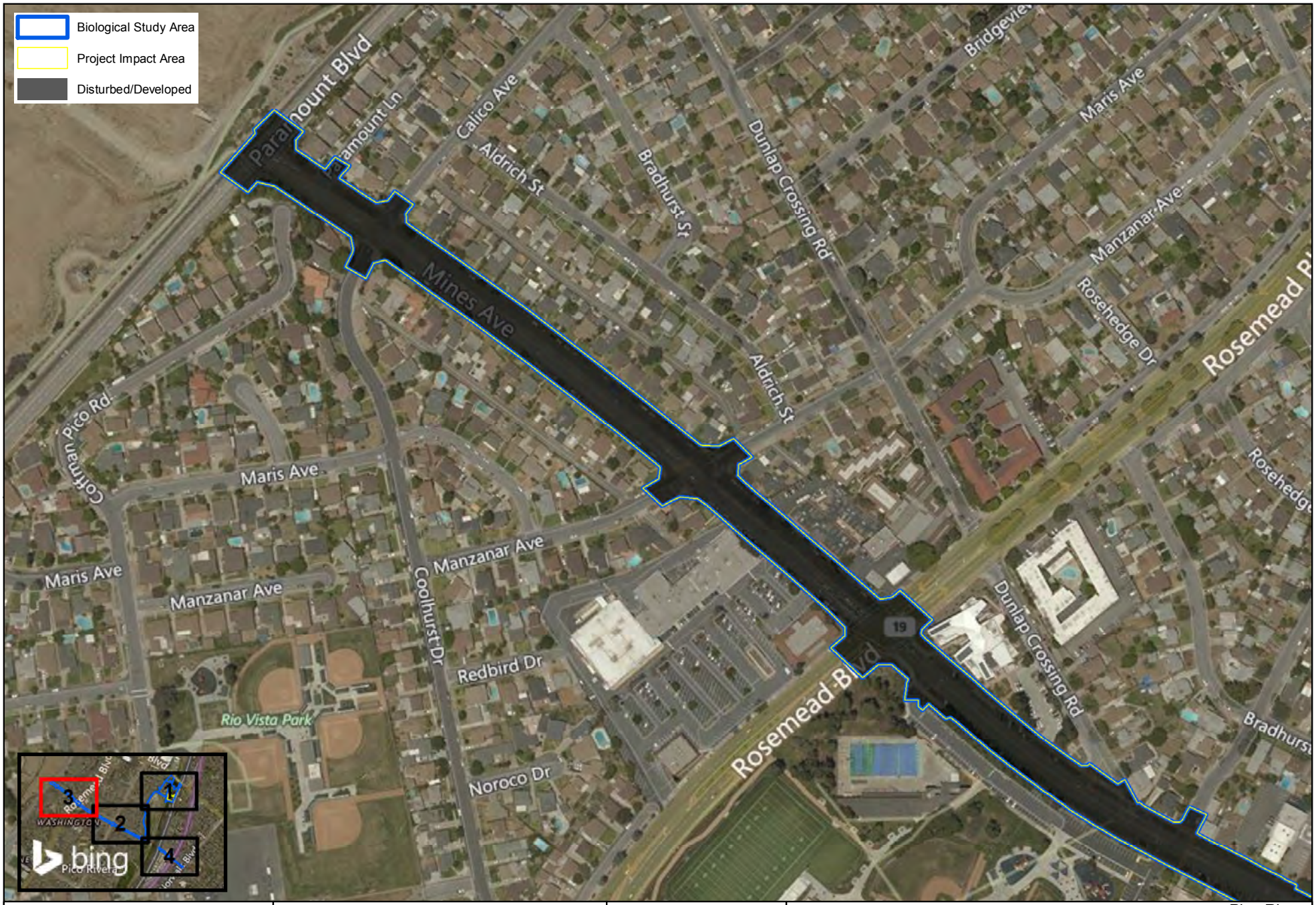
0 300 600 Feet

Data Source: BING
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 6

Vegetation/Land Cover



Prepared By:

VCS Environmental

Map Created: April 2019

0 300 600 Feet

Data Source: BING
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 6

Vegetation/Land Cover

Prepared By:

VCS Environmental

Map Created: April 2019

0 300 600 Feet

Data Source: BING
City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 6

Vegetation/Land Cover

Prepared By:

VCS Environmental

Map Created: April 2019

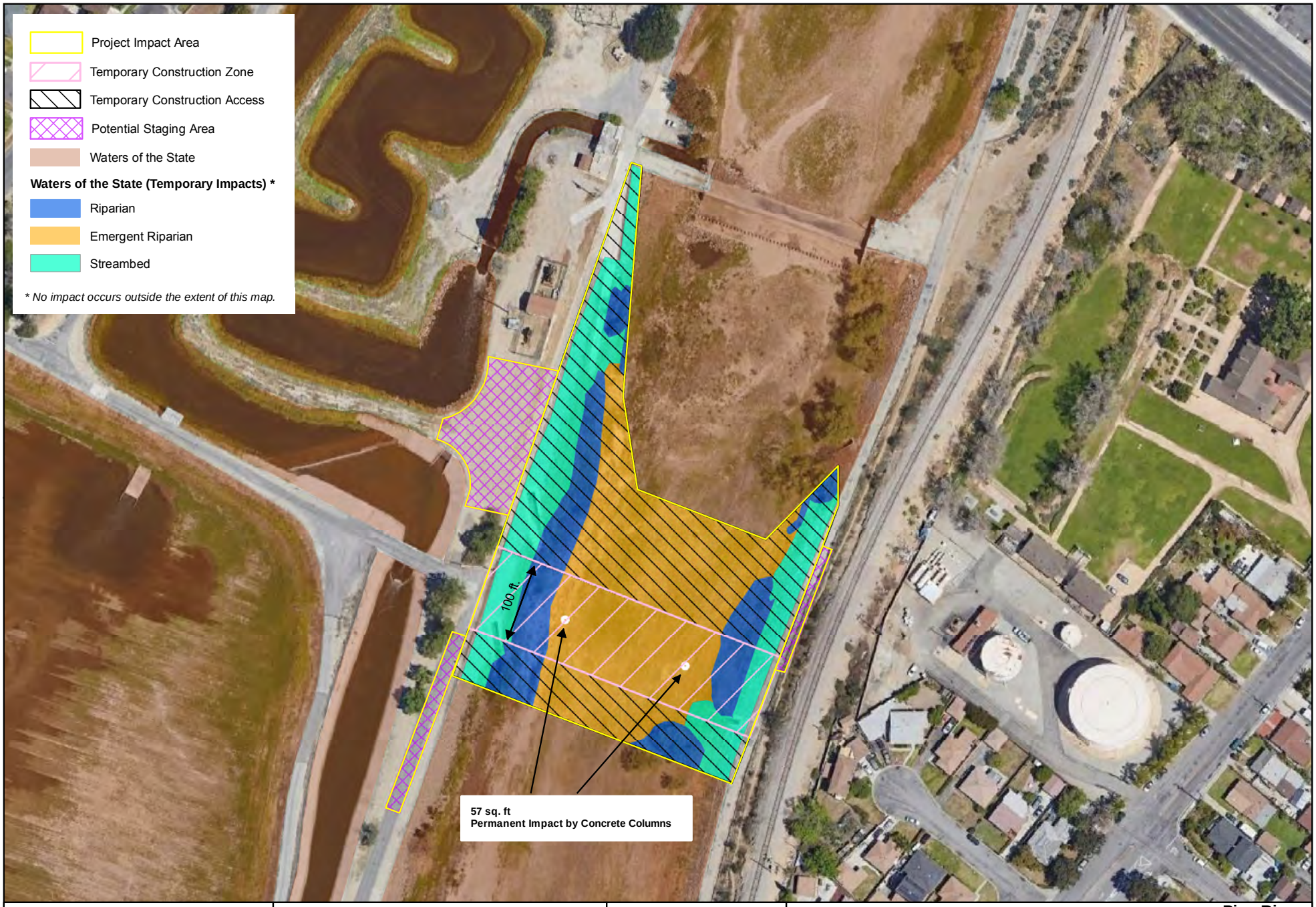
0 150 300 Feet

Data Source: Google Earth, BING, City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 7a

Waters of the U.S.



Prepared By:

VCS Environmental

Map Created: April 2019

0 150 300 Feet

Data Source: Google Earth, BING, City of Pico Rivera, BFK, VCS

Pico Rivera
Regional Bikeway Bridge Project

Figure 7b

Waters of the State

Appendix E – Representative Photographs of the Biological Study Area

Photo 1: View of potential temporary construction access area for bridge construction within the San Gabriel River, facing south.

Photo 2: View of vegetation in the potential temporary construction access area within the San Gabriel River, facing northeast.

Photo 3: View of California bulrush (*Shoenoplectus californicus*) and riparian habitat within the San Gabriel River, facing northeast.

Photo 4: View of California bulrush in the potential temporary construction access impact area within the San Gabriel River, facing southeast.

Photo 5: View of vegetation on west side of San Gabriel River within the potential construction access impact area, facing southeast.

Photo 6: View of annual herbaceous species in the potential construction zone/access impact area within the San Gabriel River, facing north.

Photo 7: View of vegetation within the Biological Study Area within the San Gabriel River, facing northeast (mostly north and outside of the Project Impact Area).

Photo 8: View of vegetation along existing paved bike path (along the construction access route) within the Biological Study Area, facing south. Outside of the Project Impact Area.

Photo 9: View of California native landscape vegetation along the existing bike path within the Biological Study Area, facing south (construction access route located outside of the Project Impact Area).

Photo 10: View of Mines Ave; the western portion of the Project Impact Area within a developed area including landscaped vegetation, facing northwest. Located west of the San Gabriel River.

Photo 11: View of Dunlap Crossing; the eastern portion of the Project Impact Area within a developed area and including associated landscaped vegetation, facing northwest. Located east of the San Gabriel River.

Photo 12: View of disturbed/developed area adjacent to and west of the San Gabriel River near the bridge construction site (potential construction staging area), viewing west.

Appendix F – Plant Species Observed During General Biological Survey

Plant Species Observed within the Biological Study Area

Scientific Name	**Common Name**
Apiaceae	**Carrot Family**
*Conium maculatum**	poison hemlock
Arecaceae	**Palm Family**
*Washingtonia robusta**	Mexican fan palm
Asteraceae (Compositae)	**Sunflower Family**
Ambrosia confertiflora	weakleaf bur ragweed
Baccharis salicifolia	mulefat
Encelia californica	California bush sunflower
Helianthus annuus	common sunflower
*Lactuca serriola**	prickly lettuce
*Sonchus oleraceus**	common sowthistle
Xanthium strumarium	cocklebur
Brassicaceae	**Mustard Family**
*Hirschfeldia incana**	shortpod mustard
*Raphanus sativus**	wild radish
Cyperaceae	**Sedge Family**
Cyperus erogrostis	tall flat sedge
Schoenoplectus californicus	California bulrush
Euphorbiaceae	**Spurge Family**
*Ricinus communis**	castor bean
Fabaceae	**Legume Family**
*Ceratonia siliqua**	carob tree
*Melilotus indicus**	sour clover
Fagaceae	**Oak Family**
Quercus agrifolia	coast live oak
Geraniaceae	**Geranium Family**
*Erodium cicutarium**	redstem filaree
Lamiaceae	**Mint Family**
Salvia apiana	white sage
Malvaceae	**Mallow Family**
*Ceiba speciosa**	silk floss tree

Scientific Name	**Common Name**
Myoporaceae	**Myoporum Family**
*Myoporum parviflorum**	creeping myoporum
Phyrymaceae	**Monkeyflower Family**
Mimulus guttatus	seep monkeyflower
Platanaceae	**Sycamore Family**
Platanus racemosa	California sycamore
Plantaginaceae	**Plantain Family**
*Plantago lanceolata**	English plantain
Veronica peregrina	purslane speedwell
Poaceae (Gramineae)	**Grass Family**
*Cynodon dactylon**	Bermuda grass
Distichlis spicata	salt grass
*Hordeum murinum**	foxtail barley
Polygonaceae	**Milkwort Family**
Persicaria hydropiperoides	swamp smartweed
*Rumex dentatus**	toothed dock
Rosaceae	**Rose Family**
Heteromeles arbutifolia	toyon
Salicaceae	**Willow Family**
Salix gooddingii	black willow
Typhaceae	**Cattail Family**
Typha sp.	cattail
Urticaceae	**Nettle Family**
*Urtica urens**	annual stinging nettle

* non-native species.