Natural Environment Study

(Minimal Impacts)

Golden Avenue Bridge Replacement/Rehabilitation Project

12-Orange-Bridge No. 55C0192

BRL-5269(025)

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STATE OF CALIFORNIA
Department of Transportation
City of Placentia

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Summary

The City of Placentia (City), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Golden Avenue Bridge over Carbon Canyon Creek (creek) in the City of Placentia. The purpose of the project is to replace a functionally obsolete bridge.

The biological study area (BSA) includes the direct project impact area and an indirect effect buffer. The buffer limits are based on the size and scope of the project and the distance that indirect effects of the project could extend. The project impact area includes the bridge, approximately 200 feet from each end of the bridge along the roadway for staging of equipment, and approximately 75 feet upstream downstream within the creek to include the access roads into the channel. The buffer within the channel extends approximately 100 feet upstream and 150 feet downstream of the project impact area.

The BSA is within a developed, urban area, and vegetation within the BSA consists mostly of ruderal and ornamental species. There are two southern California black walnut (*Juglans californica*) trees in the BSA; one is located approximately 150 feet north of the bridge, and the other is located approximately 125 feet south of the bridge. The creek consists of an earthen, un-lined channel with a narrow, rectangular concrete-lined drainage in the center of the channel for low flow. The creek flows into the Santa Ana River several miles downstream of the BSA. There is no vegetation within the concrete-lined portion of the channel and there is ruderal and ornamental vegetation along the upper dirt banks of the unlined portion of the channel. There are several invasive plant species in the BSA; however, the project would not be expected to result in the spread of invasive species with the implementation of appropriate Best Management Practices (BMP).

Several state and federally threatened or endangered species have the potential to be in the BSA based on recorded geographical distribution; however, no special-status species were detected within the BSA during a biological survey conducted on May 11, 2017. There are ornamental trees and vegetation at the top of the creek banks that could provide suitable habitat for wildlife. There are no federally or state listed species with the potential to be in the project area; therefore, consultation under the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) would not be required.

Construction activities, including removing the existing bridge, installing the new widened bridge, tree and vegetation removal, and storm drain construction work could result in direct impacts on existing vegetation and wildlife; however, with implementation of proposed avoidance and minimization, no impacts are anticipated. Construction activities could also result in temporary, indirect impacts on existing wildlife associated with noise, vibration, and dust; however, appropriate measures would be implemented to avoid or substantially minimize these impacts, and no adverse impacts are anticipated.

There are waters under jurisdiction of the United States Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB) within the ordinary high water mark of the

creek, which is the concrete-lined portion. There are waters under jurisdiction of the California Department of Fish and Wildlife (CDFW) within the concrete-lined channel, that may extend to the top of the banks of the un-lined portion of the channel. There are no wetlands within the BSA. Storm drain construction would require work in the concrete-lined portion of the creek to form a reinforced concrete collar around the additional storm drain pipes. Work would be conducted during the dry season (April to October); therefore, a water diversion would not be required for the project. A Clean Water Act (CWA), Section 401 Water Quality Certification from the RWQCB and a Section 1602 Streambed Alteration Agreement (SAA) from the CDFW would be required for the project. The project would also comply with the requirements of the Section 404 Nationwide Permit 14.

1. Introduction

History

The existing bridge was built in 1934, and is an earth-filled reinforced concrete arch bridge supported on concrete spread footings. The existing bridge is 34 feet long and 27 feet wide, and carries two lanes of traffic over the creek.

Project Purpose and Need

The bridge was determined to be functionally obsolete, according to a Caltrans Bridge Inspection Report dated September 29, 2011. The purpose of the project is to replace the functionally obsolete bridge.

Project Description

The project is located on Golden Avenue in the City of Placentia, in Orange County, within Township 3S, Range 9W, and the Yorba Linda United States Geological Survey 7.5-minute quadrangle (see **Figure 1** and **Figure 2**). The project would include the removal of the existing bridge in its entirety, including the removal of the asphalt overlay, reinforced concrete deck arch bridge, reinforced concrete spread footings, and the soil backfill contained within the arch bridge. A wider replacement bridge would be constructed, with a width of 58 feet, four inches to accommodate two traffic lanes, Class II bike lanes/shoulders, and sidewalks that meet American Association of State Highway and Transportation Officials (AASHTO) minimum standards. In addition, the replacement bridge would be longer than the existing bridge, with a length of 82 feet, six inches to accommodate a proposed bike path along the Carbon Canyon Creek Channel (creek) as part of the Orange County (OC) Loop Bikeway Project.

All work would be completed in the existing right of way (ROW), and no ROW acquisition would be required for the project. Existing utilities (gas and oil lines) on the north side of the bridge would be relocated between the bridge girders (attached) on the side of the bridge. Temporary construction easements (TCE) would be required for project construction, and would extend from the bridge deck across the 100-foot-wide flood control easement in the creek and along designated access ramps to the channel from Golden Avenue. Construction equipment would be staged along Golden Avenue to the west and east of the bridge. The staging areas would be approximately 100 feet long and 80 feet wide.

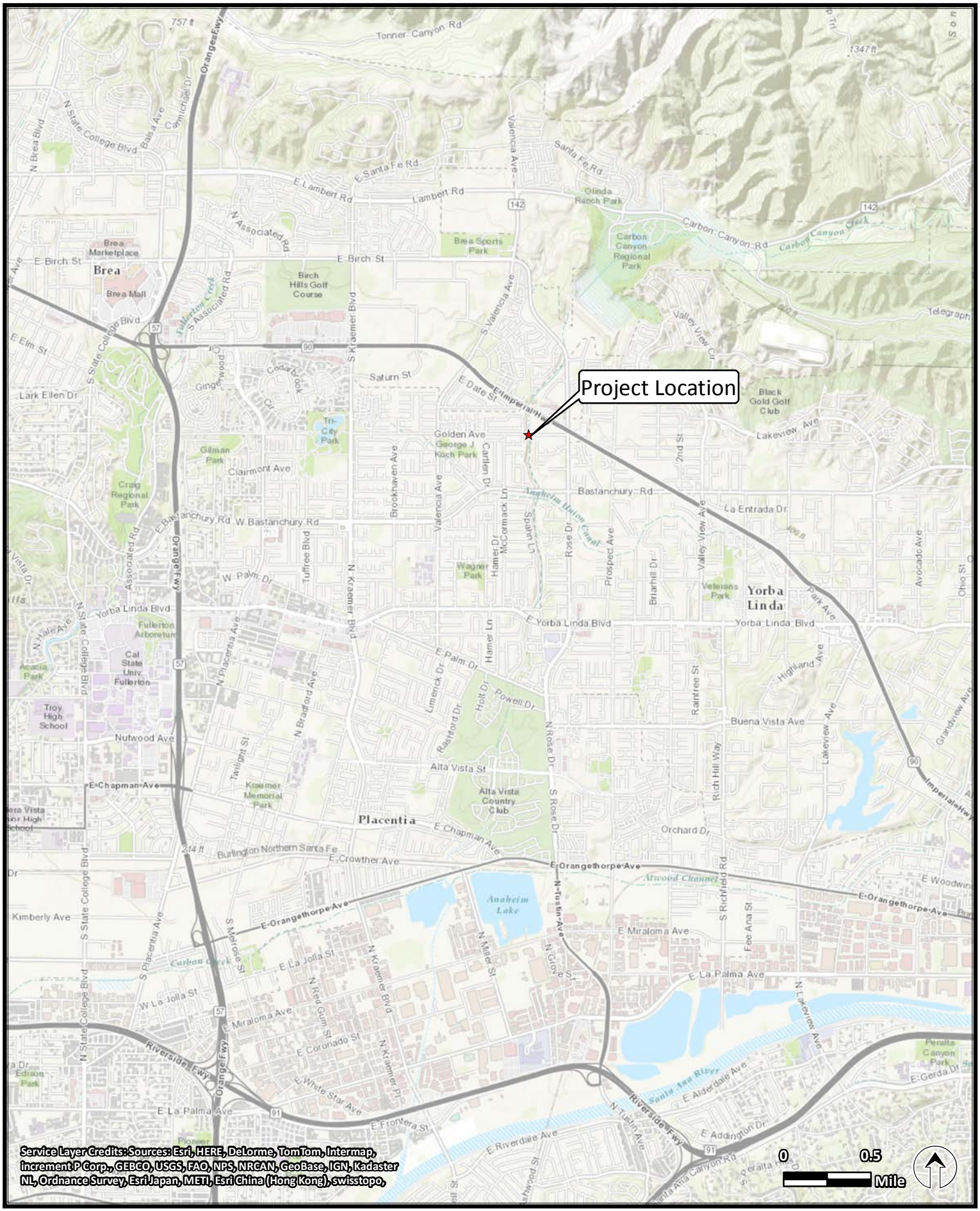

FIGURE 1. PROJECT LOCATION
Golden Avenue Bridge Replacement/Rehabilitation Project

FIGURE 2. BIOLOGICAL STUDY AREA
Golden Avenue Bridge Replacement/Rehabilitation Project

Excavation to a maximum depth of 15 feet would be required to construct the cast-in-drilled-hole piles, abutment footings, and abutment seats. Storm drain pipes would be connected at all four quadrants of the bridge to the existing concrete channel wall. To connect the storm drain pipes, work in the channel would be required to form the reinforced concrete collar around the additional storm drain pipes at each of the four locations. Construction would be conducted during the dry season (April to October); therefore, a water diversion would not be required for the project. Sand bags would be placed in the concrete-lined portion of the channel upstream of the construction area to prevent any nuisance flow from entering the construction area. The trees on both sides of the bridge would be removed to construct the project. Two trees of heaven (*Ailanthus altissima*), one on the north and one on the south side of the bridge, and two fan palms (*Washingtonia* spp.), both on the north side of the bridge, would be removed to accommodate bridge widening.

Construction would be completed within seven months. During construction, Golden Avenue would be closed from California Street to immediately west of Rose Drive, approximately 0.18 mile east of the project area; however, through access would be allowed to and from residences along Navigation Circle to the east of the bridge. Detour routes around the construction area would be available on Rose Drive, Bastanchury Road, and Valencia Avenue.

2. Study Methods

The following discussion provides a summary of state and federal laws and regulations pertaining to the project, environmental permits that are required for the project, and study methods that were undertaken as required by resource agencies and environmental laws.

Regulatory Requirements

CLEAN WATER ACT

Activities within inland streams, wetlands, and riparian areas in California are regulated by agencies at the federal, state, and regional levels. At the federal level, the USACE Regulatory Program regulates activities within federal wetlands and waters of the United States (U.S.) (WOTUS) pursuant to Section 404 of the federal CWA.

WOTUS are divided into several categories as defined by the Code of Federal Regulations (CFR). Under the CFR (CFR 33 §328.3), WOTUS include, but are not limited to:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce (including sightseeing or hunting), including all waters subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats; sand flats; wetlands; sloughs; prairie potholes; wet meadows; playa lakes; or natural ponds where the use, degradation, or destruction of which could affect interstate or foreign commerce. This includes any such waters which are or could be used by interstate or foreign travelers for recreational or other purposes, and from which fish or shellfish could be taken

and sold in interstate or foreign commerce, or which are used or could be used for industrial purposes in interstate commerce.

The limits of USACE jurisdiction extend to the ordinary high water mark. No discharge of dredged or fill material into jurisdictional features is permitted unless authorized under an USACE Nationwide Permit or Individual Permit. For all work subject to an USACE Section 404 permit, project proponents must obtain a Water Quality Certification from the applicable RWQCB under CWA Section 401 stating that the project would comply with applicable water quality regulations.

FEDERAL ENDANGERED SPECIES ACT

The FESA was established in 1973 to provide a framework to conserve and protect endangered and threatened species and their habitat. Section 10 of the FESA allows for the "incidental take" of endangered and threatened wildlife species by non-federal entities. Incidental take is defined by the FESA as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Section 10(a)(1)(B) of the FESA authorizes the taking of federally listed wildlife or fish through an incidental take permit. Section 10(a)(2)(A) of the FESA requires an applicant for an incidental take permit to submit a conservation plan that specifies, among other things, the impacts likely to result from the taking of the species, and the measures the permit applicant will take to minimize and mitigate impacts on the species.

MIGRATORY BIRD TREATY ACT

The Migratory Bird Treaty Act (MBTA) (50 CFR Part 10 and Part 21) protects migratory birds, their occupied nests, and their eggs from disturbance and/or destruction. "Migratory birds" include all nongame, wild birds found in the U.S. except for the house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and rock pigeon (*Columba livia*). This law implements various treaties between the U.S. and Canada, Mexico, the former Soviet Union, and Japan, and protects migratory birds by making it unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, or kill said species.

EXECUTIVE ORDER 13112

Executive Order 13112 directs all federal agencies to refrain from authorizing, funding, or carrying out actions or projects that may spread invasive species. This order further directs federal agencies to prevent the introduction of invasive species, control and monitor existing invasive species populations, restore native species to invaded ecosystems, research and develop prevention and control methods for invasive species, and promote public education on invasive species.

PORTER-COLOGNE ACT

The RWQCB also asserts authority over waters of the State (WoS) under the Porter-Cologne Act, which establishes a regulatory program to protect water quality and to protect beneficial uses of state waters. The Porter-Cologne Act empowers the RWQCB to formulate and adopt a Water Quality Control Plan that designates beneficial uses and establishes such water quality objectives

that in its judgment will ensure reasonable protection of beneficial uses. Each RWQCB establishes water quality objectives that will ensure the reasonable protection of beneficial uses and the prevention of water quality degradation. Dredge or fill activities with the potential to affect water quality in these waters must comply with Waste Discharge Requirements (WDR) issued by the RWQCB. WoS are defined by the Porter-Cologne Act as any surface or subsurface water or groundwater, including saline waters, within the boundaries of the state.

CALIFORNIA FISH AND GAME CODE

Section 1602 of the California Fish and Game Code governs construction activities that substantially divert or obstruct natural stream flow or substantially change the bed, channel, or bank of any river, stream, or lake under the jurisdiction of the CDFW. Under the California Fish and Game Code, the limits of CDFW's jurisdiction within streams and other drainages extends from the top of the stream bank to the top of the opposite bank, to the outer drip line in areas containing riparian vegetation, and/or within the 100-year floodplain of a stream or river system containing fish or wildlife resources. Streams are defined in the California Code of Regulations (CCR) (14 CCR Section 1.72) as "a body of water that follows at least periodically or intermittently through a bed or channel having banks and that support fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Under Section 1602, a Streambed Alteration Agreement must be issued by the CDFW prior to the initiation of construction activities that may substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel, or bank, of any river, stream, or lake; or deposit debris, waste, or other materials that could pass into any river, stream, or lake under CDFW's jurisdiction.

The CDFW has jurisdictional authority over WoS, including wetlands. In practice, CDFW follows the United States Fish and Wildlife Service (USFWS) definition of wetlands in Classification of Wetlands and Deepwater Habitats of the United States: "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: 1) at least periodically, the land supports hydrophytes; 2) the substrate is predominantly undrained hydric soil; and 3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (Cowardin et al. 1979).

Section 2126 of the California Fish and Game Code states that it is unlawful for any person to take any mammal that are identified within Section 2118, including all species of bats.

Sections 3503, 3513, and 3800 of the California Fish and Game Code prohibit the take of birds protected under the MBTA, and protects their occupied nests. In addition, Section 3503.5 of the California Fish and Game Code prohibits the take of any birds in the order Falconiformes or Strigiformes (birds-of-prey), and protects their occupied nests. State-listed species and those petitioned for listing by the CDFW are fully protected under the CESA. Under Section 2080.1 of the California Fish and Game Code, if a project would result in take of a species that is both federally and state listed, a consistency determination with the findings of the FESA determination

is required. Under Section 2081, if a project would result in take of a species that is state-only listed as threatened or endangered, then an incidental take permit from the CDFW is required.

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code prohibit the take or possession of 37 fully protected bird, mammal, reptile, amphibian, and fish species. Each of the statutes states that no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to "take" the species, and states that no previously issued permit or licenses for take of the species "shall have any force or effect" for authorizing take or possession. The CDFW will not authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

Studies Required

LITERATURE SEARCH

Prior to conducting the biological surveys, available literature was reviewed to identify any special-status plants, wildlife, and/or sensitive habitats previously recorded within or near the BSA. Sources used to identify special-status species and/or habitats with potential to be in or near the BSAs include the following:

- The CDFW's California Natural Diversity Database (CNDDB) (CDFW, 2017) for the Yorba Linda, San Dimas, Ontario, Prado Dam, Black Star Canyon, Orange, Anaheim, La Habra, and Baldwin Park 7.5-minute series topographic quadrangles (quad) (see **Appendix A**); and
- USFWS Information for Planning and Conservation Database (USFWS, 2017) (see **Appendix B**).
- California Native Plant Society (CNPS) Plant List for the Orange quad and surrounding eight quads (see **Appendix C**).
- National Marine Fisheries Service (NMFS) Species List within the Yorba Linda Quad (NMFS, 2018) (see **Appendix D**).

FIELD REVIEWS

After a review of the results of the CNDDB and USFWS queries described above, a biological survey of the BSA was conducted on May 11, 2017.

SURVEY METHODS

The BSA includes the direct project impact area and an indirect effect buffer. The project impact area includes the bridge, approximately 200 feet from each end of the bridge along the roadway for staging of equipment, and approximately 75 feet upstream downstream within the creek to include the access roads into the channel. The buffer within the channel extends approximately 100 feet upstream and 150 feet downstream of the project impact area. The BSA was visually surveyed on foot, to the extent feasible, and all plant and animal species within the BSA were identified to determine the potential for protected species to be in the BSA. Based on the existing conditions within the BSA, no focused plant or wildlife surveys were completed. Nomenclature for common, widespread plants and animals conforms to the Jepson eFlora (Jepson Flora Project,

2014) and the CNDDB. Species observed in the BSA during the May 11, 2017 biological survey are included in **Appendix E**.

Personal Survey Dates

A biological survey was conducted in the BSA by associate biologists Jennifer Johnson and Katherine Warner on May 11, 2017. Representative photographs of the BSA were taken during the survey and are included in **Appendix F**.

Agency Coordination and Professional Contacts

An official USFWS species list was requested from the USFWS Information for Planning and Conservation database and a NMFS species list was retrieved from the NMFS California Species List Tools database. The CDFW was contacted on June 7, 2017 to determine the limits of their jurisdiction within the BSA. Based off a desktop review, CDFW determined their limits to extend from the top of the earthern banks of the un-lined portion of the channel to the top of the bank on the opposite side of the channel. A field visit with CDFW is recommended to further refine the limits of CDFW jurisdiction.

Limitations That May Influence Results

There were no limitations or constraints that might influence the results of this analysis, or the survey conducted on May 11, 2017.

3. Results: Environmental Setting

Description of the Existing Biological and Physical Conditions

STUDY AREA

The BSA is approximately two acres and includes the Golden Avenue Bridge, approximately 200 feet from each end of the existing bridge, and 175 feet upstream and 225 feet downstream of the bridge (see **Figure 2**). The limits of the BSA were determined by reviewing project plans and aerial photography, and evaluating potential jurisdictional areas during field visits. The BSA is within a developed urban area, surrounded by residential properties. Land within the BSA consists of the roadway, associated sidewalks and ornamental landscaping, and the creek corridor.

PHYSICAL CONDITIONS

The creek is an earthen un-lined channel with a narrow, rectangular concrete-lined drainage in the center that flows into the Santa Ana River, several miles downstream of the BSA. The channel is unlined from the concrete channel to the top of the banks at the fence line. The rectangular concrete-lined channel has steep concrete sides and the unlined channel has gradually sloping earthen banks. Flows within the channel are likely variable, with highest flows occurring for short periods after rainstorms. The elevation within the BSA is approximately 350 to 375 feet above mean sea level.

BIOLOGICAL CONDITIONS IN THE STUDY AREA

Within the BSA, Golden Avenue is paved and there are ornamental trees along both sides of the roadway. Vegetation within the creek consists mostly of ruderal species and there is ornamental vegetation along at the top of the banks along the fence line of the adjacent properties. There are two southern California black walnut trees within the BSA approximately 150 feet north of the bridge and approximately 125 feet south of the bridge on the west side of the channel (see **Figure 4**).

HABITAT CONNECTIVITY

A migration or wildlife corridor is an area of habitat that connects two or more patches of habitat that would otherwise be isolated from each other. Wildlife corridors are typically adjacent to urban areas. A functional wildlife corridor allows for ease of movement between habitat patches and is important in preventing habitat fragmentation. Habitat fragmentation is typically caused by human development and can lead to a decrease in biodiversity and ecosystem functionality.

The BSA is surrounded by urban, developed land and there are no open areas adjacent to the BSA. There is open water habitat within the creek. Open water habitat is valuable to wildlife such as migrating birds, reptiles, and amphibians, especially during times of drought or in the heat of the summer. According to the CDFW Biogeographic Information and Observation System (BIOS) Habitat Connectivity Viewer, the BSA is not within an essential connectivity area or natural landscape block, and is not expected to be used as a regional wildlife movement corridor. However, the BSA is likely used for local wildlife movement and foraging.

Regional Species and Habitats and Natural Communities of Concern

No special-status natural communities or habitats of concern, including woodlands, riparian forests, sage scrub, or special-status fish streams were identified in the BSA.

VEGETATION

According to the CNDDB and USFWS searches, 54 special-status plant species have the potential to be in the BSA based on geographical distribution (see **Appendix A** and **Appendix B**). With the exception of the southern California black walnut, which was observed within the BSA, no other special-status plant species are expected to be within the BSA based on habitat requirements and the results of biological surveys. The locations of the two black walnuts observed within the BSA are shown in **Figure 3**.

WILDLIFE

According to the CNDDB, USFWS, and NMFS searches, 97 special-status wildlife species have the potential to be in the BSA based on recorded geographical distribution (see **Appendix A, Appendix B,** and **Appendix D**). There are no state listed threatened or endangered species with potential to be in the BSA. There are ornamental trees and vegetation at the top of the creek banks that could provide suitable habitat for wildlife.

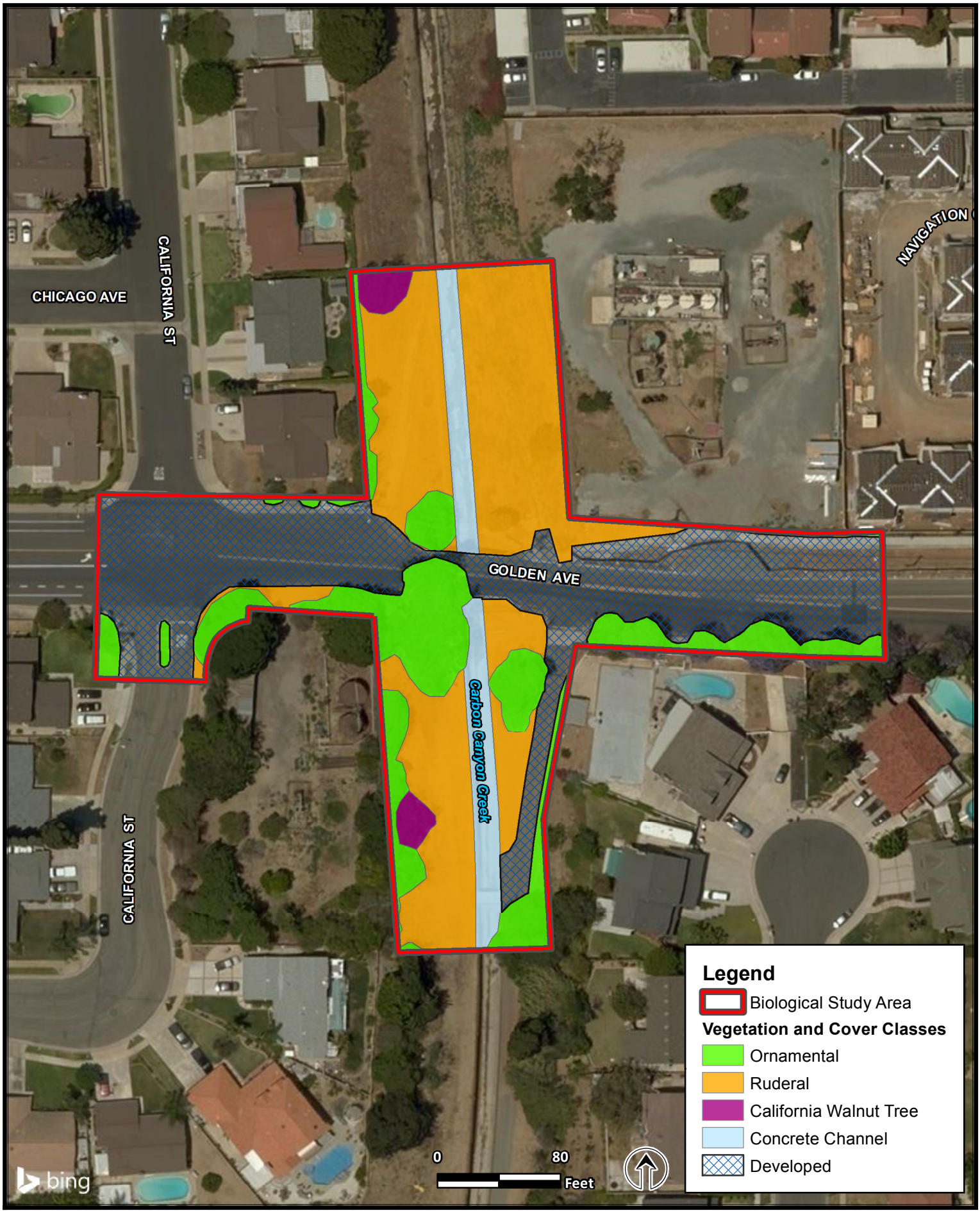

FIGURE 3. BIOLOGICAL RESOURCES MAP
Golden Avenue Bridge Replacement/Rehabilitation Project

The bridge is a concrete arch structure and does not provide cracks or crevices that could provide roosting habitat for bats. In addition, no evidence of night roosting was observed on the bridge structure. Therefore, bats are not expected to roost on the bridge. A full species list with a discussion on the potential for these species to be in the BSA is in **Appendix G**.

4. Results: Biological Resources, Discussion of Impacts & Mitigation

Habitats and Natural Communities of Special Concern

JURISDICTIONAL FEATURES

The creek consists of an earthen un-lined channel with a narrow, rectangular concrete-lined drainage in the center and flows to the Santa Ana River several miles downstream of the BSA. The creek is under jurisdiction of the USACE, RWQCB, and the CDFW.

Survey Results

Within the BSA, there is no vegetation within the concrete-lined portion of the creek and there is ruderal and ornamental vegetation along the upper dirt banks of the unlined portion of the creek. There are no wetlands within the creek. The ordinary high water mark (OHWM) is contained within the concrete-lined portion of the creek and this part of the creek is considered WOTUS under jurisdiction of the USACE and the RWQCB. The CDFW jurisdiction includes the rectangular concrete-lined channel and extends to the tops of the earthen banks within the un-lined portion of the channel.

Project Impacts

The project would include replacing the existing bridge over the creek with a wider bridge and connecting storm drain pipes at all four quadrants of the bridge to the existing concrete channel wall. Work would be conducted during the dry season (April to October); therefore, a water diversion would not be required for the project. Sand bags would be placed in the concrete-lined portion of the channel upstream of the construction area to prevent any nuisance flow from entering the construction area.

Construction equipment accessing the creek and other construction activities within the creek would result in approximately 330 linear feet and 0.08 acre of temporary impacts on waters under jurisdiction of the USACE and RWQCB, and approximately 445 linear feet and 0.91 acres of temporary impacts on waters under CDFW jurisdiction (see **Figure 4**). In addition, shading of the creek by the new widened bridge would result in approximately 0.05 acre of permanent impacts on waters under CDFW jurisdiction.

Storm drain construction would require work in the concrete-lined portion of the creek. Installation of the reinforced concrete collar around the additional storm drain pipes would result in approximately 0.01 acre of permanent impacts on waters under jurisdiction of the USACE, RWQCB, and CDFW.

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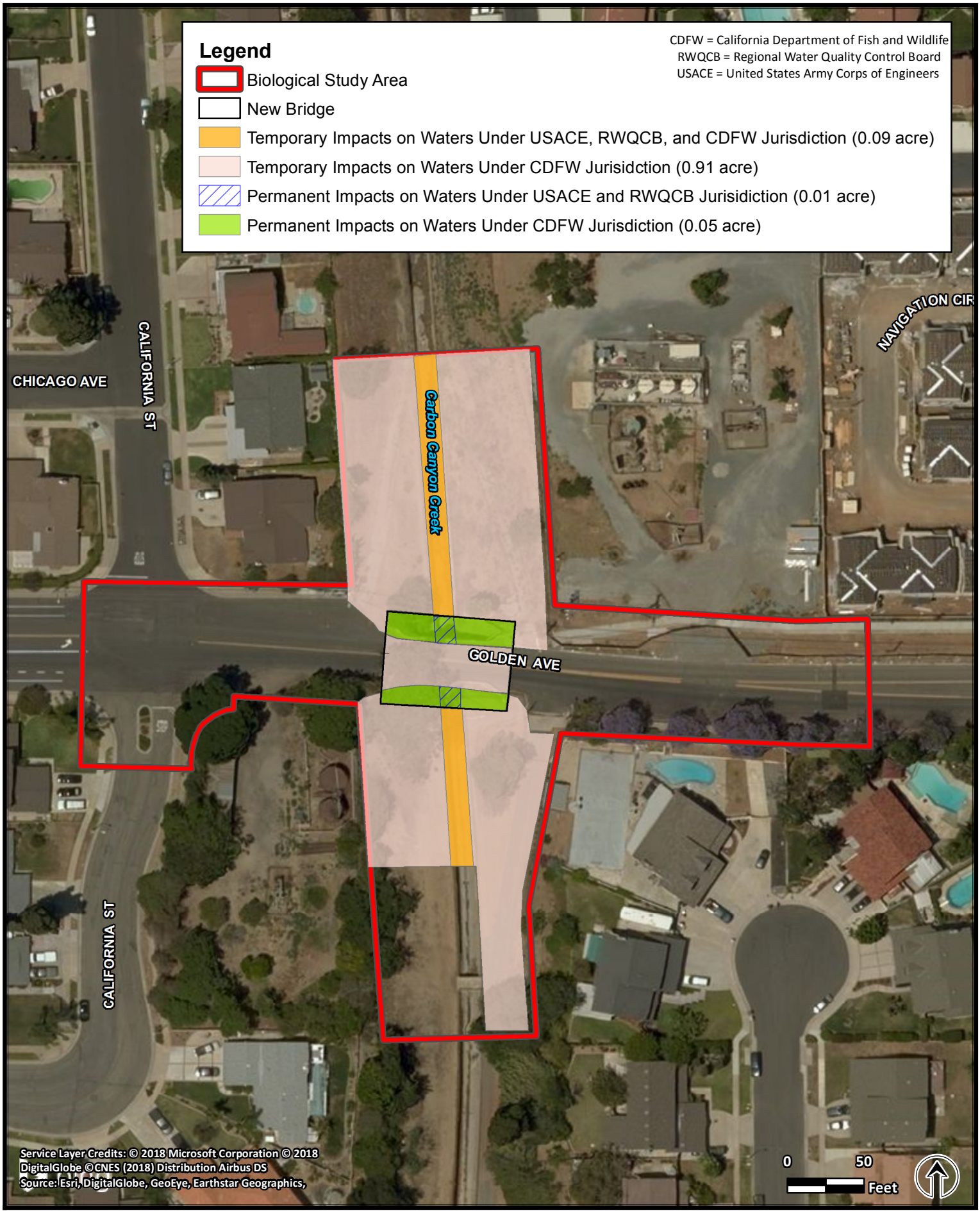

FIGURE 5. JURISDICTIONAL IMPACTS MAP
Golden Avenue Bridge Replacement/Rehabilitation Project

The project could result in the incidental release of construction materials and debris into the creek. However, with implementation of avoidance, minimization, and mitigation measures, impacts would be avoided or substantially minimized, and adverse impacts on jurisdictional features are not anticipated.

Avoidance and Minimization Efforts

To avoid and minimize impacts on jurisdictional features, the following avoidance and minimization measures would be implemented:

- Work areas would be reduced to the maximum extent feasible, and staging areas would be along the roadway and outside of the creek.
- Hazardous material BMPs, including using protective materials such as matting or basins to catch spills and leaks from fuel containers, storing waste in sealed containers, prohibiting potentially hazardous waste material from accumulating on the ground, and keeping a spill kit on site, would be implemented to reduce the potential for chemical spills or contaminant releases into the creek, including any non-stormwater discharge.
- All equipment refueling and maintenance would be conducted in the staging area away from the creek per Caltrans standard specifications. In addition, vehicles and equipment would be checked daily for fluid and fuel leaks, and drip pans would be placed under all equipment that is parked and not in operation.
- Following project construction, all temporarily disturbed areas would be restored to pre-project conditions or better, and any re-vegetation or erosion control implemented would be completed using non-invasive species.
- Invasive plant species in the project area would be removed outside of the bird nesting season (typically February 1 to September 15) and disposed of in a manner that minimizes the potential for their reestablishment. Invasive plants would be identified by a biologist prior to their removal and removal procedures would follow the recommendations of the California Invasive Plant Council. If herbicides are applied, they would be applied in compliance with applicable state and federal laws.

Compensatory Mitigation

With implementation of avoidance and minimization measures, adverse impacts are not anticipated; therefore, no mitigation is required.

Special-Status Plant Species

SOUTHERN CALIFORNIA BLACK WALNUT

The southern California black walnut is a perennial deciduous tree that is found in chaparral, cismontane woodland, coastal scrub, and riparian woodland on slopes, and in canyons and alluvial habitats. This species is considered a plant of limited distribution and is moderately threatened in California.

Survey results

Two southern California black walnut trees were observed within the BSA to the west of the channel. The trees are located approximately 150 feet north of the bridge and approximately 125 feet south of the bridge (see **Figure 4)**.

Project Impacts

The project would not require removal of the southern California black walnut trees. The southern California black walnuts could be indirectly impacted by dust and debris from construction activities. However, with implementation of avoidance and minimization measures, impacts would be avoided or substantially minimized, and adverse impacts on the southern California black walnuts are not anticipated.

Avoidance and Minimization Efforts

To avoid and minimize impacts on the southern California black walnut trees, the following avoidance and minimization measures would be implemented:

- Environmentally Sensitive Area fencing would be installed around the protected root zone of the southern California walnut trees under the supervision of a qualified biological monitor, to prevent damage to roots or trunks of the trees. The protected root zone would be determined by measuring the tree diameter in inches at 4.5 feet up the tree trunk and multiplying that number by 1.5 to get the distance in feet from the trunk where the protected root zone should be established. No work would be allowed within the protected root zone of these trees.

Compensatory Mitigation

With implementation of avoidance and minimization measures, adverse impacts are not anticipated; therefore, no mitigation is required.

Special-Status Animal Species Occurrences

Several state and federally threatened or endangered species have the potential to be in the BSA based on recorded geographical distribution; however, no special-status species were detected within the BSA during the biological survey conducted on May 11, 2017. There are dry, open areas at the top of the creek banks that could provide suitable habitat for the coastal whiptail, a California Species of Special Concern, and large trees along the adjacent property lines east and west of the creek and a palm tree adjacent to the bridge that could provide roosting habitat for bats. These species are discussed further below. There is no suitable habitat for federally or state listed species within the BSA; therefore, the project would have no effect on these species and they are not further discussed.

COASTAL WHIPTAIL

The coastal whiptail is a California Species of Special Concern. This species is found primarily in hot and dry open areas with sparse foliage, including chaparral, woodland, and riparian areas. This species is also found in woodland and riparian areas where the ground may be firm soil, sandy, or rocky.

Survey Results

The coastal whiptail was not observed during the biological survey conducted on May 11, 2017. However, there are dry, open areas at the top of the creek banks that could provide suitable habitat for the coastal whiptail. Therefore, there is potential for this species to be within the BSA.

Project Impacts

Construction activities could directly impact the coastal whiptail if they were to be run over by vehicles or construction equipment. Construction materials, dust, and debris could also result in impacts on the coastal whiptail if they were to be smothered during construction activities. However, with implementation of avoidance and minimization measures, impacts would be avoided or substantially minimized, and adverse impacts on the coastal whiptail are not anticipated.

Avoidance and Minimization Efforts

To avoid and minimize impacts on the coastal whiptail, the following avoidance and minimization measures would be implemented:

- A qualified biologist would complete pre-construction surveys no more than 48 hours prior to construction to determine the presence or absence of wildlife, including the coastal whiptail, in the project area. Surveys would be repeated if construction activities are suspended for five days or more. If any wildlife species are identified, appropriate measures would be developed and implemented to avoid impacts on these wildlife species, in consultation with appropriate resource agencies as applicable.

Compensatory Mitigation

With implementation of avoidance and minimization measures, adverse impacts are not anticipated; therefore, no mitigation is required.

BATS

The western red bat and western yellow bat are California Species of Special Concern that have potential to be in the BSA. The western red bat roosts primarily in trees, sometimes shrubs, from sea level up through mixed conifer forests. This species prefers habitat edges and mosaics with trees that are protected from above and open areas below for foraging. The western yellow bat roosts in trees, particularly palm oases and riparian habitats. This species forages over open water and is not often found in urban areas.

Survey Results

The western red bat and western yellow bat were not observed during the biological survey conducted on May 11, 2017. However, there are large trees along the adjacent property lines east and west of the creek and a palm tree adjacent to the bridge that could provide roosting habitat for bats.Therefore, there is potential for these species to be within the BSA.

Project Impacts

Bats could be directly impacted if they were to roost within trees or vegetation that being removed during construction activities. Noise and disturbance from adjacent construction activities could result in indirect impacts on bats roosting in trees immediately adjacent to the construction area, causing roost abandonment. However, with implementation of avoidance and minimization measures, impacts would be avoided or substantially minimized, and adverse impacts on bats are not anticipated.

Avoidance and Minimization Efforts

To avoid and minimize impacts on bats, the following measures would be implemented:

- Any tree removal would be conducted during the month of October to avoid bat maternity and hibernation season, where feasible. Removal would be conducted as close to sunset as possible.
- At least 30 days prior to tree removal, all trees to be removed would be surveyed by a qualified biologist to assess the presence of bats or potential bat-roosting cavities. If bats or bat-roosting cavities are identified, exclusion measures would be discussed with a qualified bat biologist and Caltrans biologist. During the non-breeding and active season (typically October), bats would be safely evicted and excluded from trees to be removed, to the extent feasible, under the direction of a qualified biologist, to prevent bats from roosting in these cavities prior to tree removal.
- A qualified biological monitor would be onsite during tree removal in the event that all bats were not able to be excluded from the trees to be removed. If bats are disturbed during tree removal, work would be safely stopped until the bats have left the vicinity on their own. Work would resume only once all bats have left the site and/or approval to resume work is given by a qualified biologist.
- Surveys and exclusion measures are expected to prevent maternal colonies from becoming established in the BSA. In the event that a maternal colony of bats is found, the CDFW would be consulted, and no work would be conducted within 100 feet of the maternal roosting site until the maternal season is over or the bats have left the site, or as otherwise directed by the CDFW. The site would be designated as a sensitive area and protected as such until the bats have left the site. No clearing and grubbing would be authorized adjacent to the roosting site. Combustion equipment, such as generators, pumps, and vehicles, would not to be parked nor operated under or adjacent to the roosting site. Construction personnel would not be authorized to enter areas beneath the colony, especially during the evening exodus.

Compensatory Mitigation

With implementation of avoidance and minimization measures, adverse impacts are not anticipated; therefore, no mitigation is required.

5. Conclusions & Regulatory Determination

Federal Endangered Species Act Consultation Summary

The project would have no effect on federally listed species; therefore, consultation under FESA is not required.

Essential Fish Habitat Consultation Summary

There is no essential fish habitat in the BSA; therefore, the project would have no effect on essential fish habitat.

Wetlands and Other Waters Coordination Summary

Storm drain construction would require work in the concrete-lined portion of the creek to form a reinforced concrete collar around the additional storm drain pipes. Work would be conducted during the dry season (April to October); therefore, a water diversion would not be required for the project. A CWA Section 401 Water Quality Certification application would be submitted to the RWQCB and a Section 1602 Streambed Alteration Notification would be submitted to the CDFW prior to construction. The project would comply with the requirements of the Section 404 NWP 14; however, because permanent impacts on WOTUS are less than 0.10 acre, a pre-construction notification would not be submitted to the USACE.

Invasive Species

There are several invasive plant species growing in the BSA (see **Appendix E**). Soil disturbance, improper disposal of graded and excavated soils, or landscaping with invasive species could result in the spread of invasive species. However, the following standard measures would be implemented to prevent the spread of invasive species:

- Vegetation removed from the BSA would be treated and disposed of in a manner that would prevent the spread of invasive species onsite or offsite.
- New landscaping materials, including erosion control seed mixes and other plantings, would be composed of non-invasive species and would be clear of weeds, and all erosion control and landscape planting would be conducted in a manner that would not result in the spread of invasive species.
- Plants listed in the Pest Ratings of Noxious Weed Species and Noxious Weed Seed (State of California Department of Food and Agriculture, 2010) would not be used as part of the project.

With implementation of these measures, the project would be in compliance with the Executive Order 13112.

Migratory Birds

There is the potential for migratory birds to be in the BSA and construction area during construction. A Cooper's hawk, a Watch List species, was observed flying over the BSA during the biological survey. There are ornamental trees patches and vegetation within the BSA; therefore, there is potential for this species, and other migratory birds, to nest and forage in the

BSA. Nesting birds could be directly impacted by construction activities, if they were to be nesting in trees or vegetation within the construction area. In addition, these species could be indirectly impacted by loss of habitat resulting from tree or vegetation removal.

If construction is scheduled to begin during bird nesting season (typically February 1 to September 15), the following measures would be implemented:

- Construction in areas with trees or vegetation that may provide nesting habitat for birds and raptors would be reduced to the maximum extent feasible.
- Trimming and removal of vegetation and trees would be minimized and performed outside of the nesting season (typically February 1 to September 15) to the extent feasible.
- In the event that trimming or removal of vegetation and trees must be conducted during the nesting season, nesting bird surveys would be completed by a qualified biologist no more than 48 hours prior to trimming or clearing activities to determine if nesting birds are within the affected vegetation. Nesting bird surveys would be repeated if trimming or removal activities are suspended for five days or more. In the event construction is scheduled during bird nesting season, nesting bird surveys would be completed no more than 48 hours prior to construction to determine if nesting birds, raptors, or active nests are in or within 500 feet of the construction area. Surveys would be repeated if construction activities are suspended for five days or more.
- In the event nesting birds or raptors are found within 500 feet of the construction area, appropriate buffers (typically up to 300 feet for songbirds and up to 500 feet for raptors) would be implemented, in coordination with the CDFW, to ensure that nesting birds and active nests are not harmed. Buffers would include fencing or other barriers around the nests to prevent any access to these areas and would remain in place until birds have fledged and/or the nest is no longer active, as determined through coordination with the CDFW.

With implementation of this measure, the project would be in compliance with the MBTA and California Fish and Game Code.

References

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Appendix A CNDDB Species List

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Anaheim (3311778) OR Baldwin Park (3411718) OR Black Star Canyon (3311776) OR La Habra (3311788) OR Ontario (3411716) OR Orange (3311777) OR Prado Dam (3311786) OR San Dimas (3411717) OR Yorba Linda (3311787))

Golden Avenue Bridge Replacement

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Abronia villosa var. aurita chaparral sand-verbena	PDNYC010P1	None	None	G5T2T3	S2	1B.1
Accipiter cooperii Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Candidate Endangered	G2G3	S1S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Ammodramus savannarum grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Asio otus long-eared owl	ABNSB13010	None	None	G5	S3?	SSC
Aspidoscelis hyperythra orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Baccharis malibuensis Malibu baccharis	PDAST0W0W0	None	None	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Branchinecta sandiegonensis San Diego fairy shrimp	ICBRA03060	Endangered	None	G2	S2	
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Campylorhynchus brunneicapillus sandiegensis coastal cactus wren	ABPBG02095	None	None	G5T3Q	S3	SSC
Catostomus santaanae Santa Ana sucker	AFCJC02190	Threatened	None	G1	S1	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Chaetodipus fallax fallax northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	SSC
Choeronycteris mexicana Mexican long-tongued bat	AMACB02010	None	None	G4	S1	SSC
Chorizanthe parryi var. fernandina San Fernando Valley spineflower	PDPGN040J1	Proposed Threatened	Endangered	G2T1	S1	1B.1
Chorizanthe polygonoides var. longispina long-spined spineflower	PDPGN040K1	None	None	G5T3	S3	1B.2
Cladium californicum California saw-grass	PMCYP04010	None	None	G4	S2	2B.2
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Crotalus ruber red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
Diplectrona californica California diplectronan caddisfly	IITRI23010	None	None	G1G2	S1S2	
Dodecahema leptoceras slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eremophila alpestris actia California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
Eriastrum densifolium ssp. sanctorum Santa Ana River woollystar	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Falco columbarius merlin	ABNKD06030	None	None	G5	S3S4	WL
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Gila orcuttii arroyo chub	AFCJB13120	None	None	G2	S2	SSC
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Hesperocyparis forbesii Tecate cypress	PGCUP040C0	None	None	G2	S2	1B.1
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Lepechinia cardiophylla heart-leaved pitcher sage	PDLAM0V020	None	None	G3	S2S3	1B.2
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Lepus californicus bennettii San Diego black-tailed jackrabbit	AMAEB03051	None	None	G5T3T4	S3S4	SSC
Lithobates pipiens northern leopard frog	AAABH01170	None	None	G5	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Monardella australis ssp. jokerstii Jokerst's monardella	PDLAM18112	None	None	G4T1	S1	1B.1
Monardella hypoleuca ssp. intermedia intermediate monardella	PDLAM180A4	None	None	G4T2?	S2?	1B.3
Muhlenbergia californica California muhly	PMPOA480A0	None	None	G4	S4	4.3
Myotis yumanensis Yuma myotis	AMACC01020	None	None	G5	S4	
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
Neotoma lepida intermedia San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
Nolina cismontana chaparral nolina	PMAGA080E0	None	None	G3	S3	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Penstemon californicus California beardtongue	PDSCR1L110	None	None	G3	S2	1B.2
Pentachaeta aurea ssp. allenii Allen's pentachaeta	PDAST6X021	None	None	G4T1	S1	1B.1
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Riversidian Alluvial Fan Sage Scrub Riversidian Alluvial Fan Sage Scrub	CTT32720CA	None	None	G1	S1.1	
Salvadora hexalepis virgultea coast patch-nosed snake	ARADB30033	None	None	G5T4	S2S3	SSC
Senecio aphanactis chaparral ragwort	PDAST8H060	None	None	G3	S2	2B.2
Setophaga petechia yellow warbler	ABPBX03010	None	None	G5	S3S4	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sidalcea neomexicana	PDMAL110J0	None	None	G4	S2	2B.2
salt spring checkerbloom						
Southern California Arroyo Chub/Santa Ana Sucker Stream	CARE2330CA	None	None	GNR	SNR	
Southern California Arroyo Chub/Santa Ana Sucker Stream						
Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
Southern Coast Live Oak Riparian Forest						
Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
Southern Cottonwood Willow Riparian Forest						
Southern Interior Cypress Forest	CTT83230CA	None	None	G2	S2.1	
Southern Interior Cypress Forest						
Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
Southern Riparian Scrub						
Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Southern Sycamore Alder Riparian Woodland						
Southern Willow Scrub	CTT63320CA	None	None	G3	S2.1	
Southern Willow Scrub						
Spea hammondii	AAABF02020	None	None	G3	S3	SSC
western spadefoot						
Symphyotrichum defoliatum	PDASTE80C0	None	None	G2	S2	1B.2
San Bernardino aster						
Taricha torosa	AAAAF02032	None	None	G4	S4	SSC
Coast Range newt						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
American badger						
Thamnophis hammondii	ARADB36160	None	None	G4	S3S4	SSC
two-striped gartersnake						
Thysanocarpus rigidus	PDBRA2Q070	None	None	G1G2	S1	1B.2
rigid fringepod						
Vireo bellii pusillus	ABPBW01114	Endangered	Endangered	G5T2	S2	
least Bell's vireo						
Walnut Forest	CTT81600CA	None	None	G1	S1.1	
Walnut Forest						

Record Count: 97

Appendix B USFWS Species List

United States Department of the Interior

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

In Reply Refer To: February 15, 2018
Consultation Code: 08ECAR00-2017-SLI-0762
Event Code: 08ECAR00-2018-E-01235
Project Name: Golden Avenue Bridge Replacement Project

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

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

Project Summary

Consultation Code: 08ECAR00-2017-SLI-0762

Event Code: 08ECAR00-2018-E-01235

Project Name: Golden Avenue Bridge Replacement Project

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: The City of Placentia in cooperation with the California Department of Transportation, is proposing to replace the existing Golden Avenue Bridge over Carbon Canyon Creek Channel in the City of Placentia. The existing bridge is an earth-filled reinforced concrete arch bridge supported on concrete spread footings and carries two lanes of traffic over the Carbon Canyon Creek Channel. The anticipated replacement bridge would accommodate two traffic lanes and would be longer in order to accommodate the bike path along the Carbon Canyon Creek Channel as part of the Orange County Loop Bikeway Project.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.90390809092828N117.84585982561113W

Counties: Orange, CA

Endangered Species Act Species

There is a total of 3 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Birds

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

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Critical habitats

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

Appendix C CNPS Inventory of Rare and Endangered Plants List

Scientific Name	Common Name	CRPR		GRank	SRank	CESA	FESA
Abronia maritima	red sand-verbena		4.2	G4	S3S4	None	None
Abronia villosa var. aurita	chaparral sand-verbena	1B.1		G5T2T3	S2	None	None
Aphanisma blitoides	aphanisma	1B.2		G3G4	S2	None	None
Astragalus brauntonii	Braunton's milk-vetch	1B.1		G2	S2	None	FE
Atriplex coulteri	Coulter's saltbush	1B.2		G3	S1S2	None	None
Atriplex pacifica	South Coast saltscale	1B.2		G4	S2	None	None
Atriplex parishii	Parish's brittlescale	1B.1		G1G2	S1	None	None
Atriplex serenana var. davidsonii	Davidson's saltscale	1B.2		G5T1	S1	None	None
Baccharis malibuensis	Malibu baccharis	1B.1		G1	S1	None	None
Brodiaea filifolia	thread-leaved brodiaea	1B.1		G2	S2	CE	FT
Calandrinia breweri	Brewer's calandrinia		4.2	G4	S4	None	None
Calochortus catalinae	Catalina mariposa lily		4.2	G4	S4	None	None
Calochortus plummerae	Plummer's mariposa lily		4.2	G4	S4	None	None
Calochortus weedii var. intermedius	intermediate mariposa lily	1B.2		G3G4T2	S2	None	None
Calystegia felix	lucky morning-glory		3.1	GHQ	SH	None	None
Camissoniopsis lewisii	Lewis' evening-primrose		3	G4	S4	None	None
Centromadia parryi ssp. australis	southern tarplant	1B.1		G3T2	S2	None	None
Centromadia pungens ssp. laevis	smooth tarplant	1B.1		G3G4T2	S2	None	None
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	1B.2		G4?T1	S1	CE	FE
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	1B.1		G2T1	S1	CE	FC
Chorizanthe polygonoides var. longispina	long-spined spineflower	1B.2		G5T3	S3	None	None
Convolvulus simulans	small-flowered morning-glory		4.2	G4	S4	None	None
Deinandra paniculata	paniculate tarplant		4.2	G4	S4	None	None
Dodecahema leptoceras	slender-horned spineflower	1B.1		G1	S1	CE	FE
Dudleya multicaulis	many-stemmed dudleya	1B.2		G2	S2	None	None
Dudleya stolonifera	Laguna Beach dudleya	1B.1		G1	S1	CT	FT
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	1B.1		G4T1	S1	CE	FE
Eryngium aristulatum var. parishii	San Diego button-celery	1B.1		G5T1	S1	CE	FE
Harpagonella palmeri	Palmer's grapplinghook		4.2	G4	S3	None	None
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	1A		G5TH	SH	None	None
Hesperocyparis forbesii	Tecate cypress	1B.1		G2	S2	None	None
Hordeum intercedens	vernal barley		3.2	G3G4	S3S4	None	None
Horkelia cuneata var. puberula	mesa horkelia	1B.1		G4T1	S1	None	None

Juglans californica	Southern California black walnut		4.2	G3	S3	None	None
Juncus acutus ssp. leopoldii	southwestern spiny rush		4.2	G5T5	S4	None	None
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	1B.1		G4T2	S2	None	None
Lepechinia cardiophylla	heart-leaved pitcher sage	1B.2		G3	S2S3	None	None
Lepidium virginicum var. robinsonii	Robinson's pepper-grass		4.3	G5T3	S3	None	None
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily		4.2	G4T3	S3	None	None
Monardella australis ssp. jokerstii	Jokersts monardella	1B.1		G4T1	S1	None	None
Monardella hypoleuca ssp. intermedia	intermediate monardella	1B.3		G4T2?	S2?	None	None
Nama stenocarpa	mud nama	2B.2		G4G5	S1S2	None	None
Nasturtium gambelii	Gambel's water cress	1B.1		G1	S1	CT	FE
Navarretia prostrata	prostrate vernal pool navarretia	1B.1		G2	S2	None	None
Nemacaulis denudata var. denudata	coast woolly-heads	1B.2		G3G4T2	S2	None	None
Nolina cismontana	chaparral nolina	1B.2		G3	S3	None	None
Orcuttia californica	California Orcutt grass	1B.1		G1	S1	CE	FE
Penstemon californicus	California beardtongue	1B.2		G3	S2	None	None
Pentachaeta aurea ssp. allenii	Allen's pentachaeta	1B.1		G4T1	S1	None	None
Phacelia hubbyi	Hubby's phacelia		4.2	G4	S4	None	None
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia		3.2	G5?T3	S3	None	None
Pickeringia montana var. tomentosa	woolly chaparral-pea		4.3	G5T3T4	S3S4	None	None
Polygala cornuta var. fishiae	Fish's milkwort		4.3	G5T4	S4	None	None
Pseudognaphalium leucocephalum	white rabbit-tobacco	2B.2		G4	S2	None	None
Quercus engelmannii	Engelmann oak		4.2	G3	S3	None	None
Romneya coulteri	Coulter's matilija poppy		4.2	G4	S4	None	None
Sagittaria sanfordii	Sanford's arrowhead	1B.2		G3	S3	None	None
Senecio aphanactis	chaparral ragwort	2B.2		G3	S2	None	None
Sidalcea neomexicana	salt spring checkerbloom	2B.2		G4	S2	None	None
Suaeda esteroa	estuary seablite	1B.2		G3	S2	None	None
Symphyotrichum defoliatum	San Bernardino aster	1B.2		G2	S2	None	None

Appendix D NMFS Species List

Quad Name **Yorba Linda**
Quad Number **33117-H7**

ESA Anadromous Fish

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

ESA Anadromous Fish Critical Habitat

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

ESA Marine Invertebrates

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

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

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

ESA Whales

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

ESA Pinnipeds

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

Essential Fish Habitat

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

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

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

MMPA Cetaceans -
MMPA Pinnipeds -

Appendix E Species Observed During Field Survey

Project: Golden Avenue Bridge 5/11/17 Plant Surveys

Scientific Name	*Common Name*	*Family*	*Native/Non-native/Invasive*
Plants			
Ailanthus altissima	tree of heaven	Simaroubaceae	non-native/invasive
Aizoaceae sp.	iceplant	Aizoaceaea	non-native
Ambrosia psilostachya	ragweed	Asteraceae	native
Arundo donax	giant reed	Poaceae	non-native/invasive
Avena barbata	slender oat	Poaceae	non-native/invasive
Bougainvillea sp.	bougainvillea	Nyctaginaceae	non-native
Bromus diandrus	ripgut brome	Poaceae	non-native/invasive
Centaurea melitensis	tocalote	Asteraceae	non-native/invasive
Chenopodium murale	sowbane	Chenopodiaceae	non-native
Chenopodium sp.	goosefoot	Chenopodiaceae	unknown
Chorisia speciosa	floss silk tree	Bombacaceae	non-native
Citrus tangerina	tangerine	Rutaceae	non-native
Datura wrightii	jimsonweed	Solanaceae	native
Erigeron canadensis	Canada horseweed	Asteraceae	native
Erodium circutarium	red stemmed filaree	Geraniaceae	non-native/invasive
Euphorbia sp.	spurge	Euphorbiaceae	non-native
Hirschfeldia incana	summer mustard	Brassicaceae	non-native/invasive
Hordeum murinum	foxtail barley	Poaceae	non-native/invasive
Hypochaeris glabra	smooth cat's ear	Asteraceae	non-native/invasive
Jacaranda mimosifolia	black poui	Bignoniaceae	non-native
Juglans californica	southern California walnut	Juglandaceae	native
Juniperus chinensis	Chinese juniper	Cupressaceae	non-native
Lactuca seriola	prickly lettuce	Asteraceae	non-native
Lagerstroemia indica	crapemyrtle	Lagerstroemia	non-native
Ligustrum sp.	privet	Oleaceae	non-native
Malosma laurina	laurel sumac	Anacardiaceae	native
Malva parviflora	cheeseweed mallow	Malvaceae	non-native
Marrubium vulgare	white horehound	Lamiaceae	non-native/invasive
Medicago polymorpha	bur clover	Fabaceae	non-native/invasive
Melaleuca viminalis	weeping bottlebrush	Myrtaceae	non-native
Nandina sp.	heavenly bamboo	Berberidaceae	non-native
Nerium oleander	oleander	Apocynaceae	non-native
Nicotiana glauca	tree tobacco	Solanaceae	non-native/invasive
Olea europaea	olive	Oleaceae	non-native/invasive
Osteospermum ecklonis	blue & white daisybush	Asteraceae	non-native
Passiflora sp.	passionflower	Passifloraceae	non-native
Phyllostachys sp.	bamboo	Poaceae	non-native
Pinus sylvestris	Scotch pine	Pinaceae	non-native
Pittosporum undulatum	victorian box	Pittosporaceae	non-native
Plantago lanceolata	narrow leaved plantain	Plantaginaceae	non-native/invasive
Plumbago auriculata	cape leadwort	Plumbaginaceae	non-native
Psilocarphus sp.	woolly marbles	Asteraceae	native
Raphiolepis indica	Indian hawthorn	Rosaceae	non-native
Ricinus communis	castor bean	Euphorbiaceae	non-native/invasive
Salsola tragus	Russianthistle	Chenopodiaceae	non-native/invasive
Sambucus nigra	black elderberry	Adoxaceae	native
Solanum americanum	common nightshade	Solanaceae	native
Sonchus oleraceus	sow thistle	Asteraceae	non-native
Stipa miliacea	smilo grass	Poaceae	non-native
Taraxacum officinale	common dandelion	Asteraceae	non-native
Ulmus parvifolia	Chinese elm	Ulmaceae	non-native
Urtica urens	dwarf nettle	Urticaceae	non-native
Washingtonia robusta	Mexican fan palm	Areaceae	non-native/invasive
Wildlife			
Accipiter cooperii	Cooper's hawk		
Anisoptera sp.	dragonfly		
Buteo lineatus	red-shouldered hawk		
Calypte anna	Anna's hummingbird		
Corvus brachyrhynchos	American crow		
Danaus plexippus	monarch butterfly		
Formicoidea sp.	red ant		

Haemorhous mexicanus	house finch
Melozone crissalis	California towhee
Mimus polyglottos	northern mockingbird
Myiarchus cinerascens	ash-throated flycatcher
Nymphalis antiopa	mourning cloak butterfly
Passer domesticus	house sparrow
Phoebis sp.	sulphur butterfly
Pieris rapae	cabbage white butterfly
Psaltriparus minimus	bushtit
Sayornis nigricans	black phoebe
Sceloporus occidentalis	western fence lizard
Spinus psaltria	lesser goldfinch
Thryomanes bewickii	Bewick's wren
Vireo huttoni	Hutton's vireo
Xylocopa sp.	carpenter bee

Appendix F BSA Photographs

Photo 1. Golden Avenue Bridge, view looking northeast

Photo 2. Carbon Canyon Creek Channel south of the bridge, view looking south

Photo 3. Paved access road into the channel east of the bridge, view looking south

Photo 4. Southern California black walnut tree south of the bridge, view looking northwest

Photo 5. Carbon Canyon Creek Channel south of the bridge, view looking north

Photo 6. Underside of Golden Avenue Bridge structure

Photo 7. Carbon Canyon Creek Channel, north of the bridge, view looking north

Photo 8. Southern California black walnut tree north of the bridge, view looking west

Photo 9. Carbon Canyon Creek Channel, view looking south

Photo 10. Golden Avenue Bridge, view looking west

Photo 11. Golden Avenue west of bridge, view looking west

Appendix G Listed and Proposed Species and Natural Communities with Potential to be in the BSA

Table 1: Listed and Proposed Species and Natural Communities, and Critical Habitat with Potential to be in the Golden Avenue Bridge BSA

Common and Scientific Names	Status			General Habitat Description*	Habitat Present/ Absent	Rationale for Species Presence/Absence
	Federal USFWS	State CDFW	CNPS			
Plants						
Abronia villosa var. *aurita* Chaparral sand-verbena	--	--	1B.1	The chaparral sand-verbena is an annual herb found in chaparral, coastal scrub, and desert dunes in sandy soils. Typical blooming period: January to September Elevation range: 246 to 5,249 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Androsace elongate ssp. acuta California androsace	--	--	4.2	The California androsace is an annual herb found on slopes in chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, and valley and foothill grassland habitats. Typical blooming period: March to June Elevation range: 492 to 4,281 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Asplenium vespertinum Western spleenwort	--	--	4.2	The western spleenwort is a perennial rhizomatous herb found in chaparral, cismontane woodland, and coastal scrub in rocky sites. Typical blooming period: February to June Elevation range: 590 to 3,280 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Astragalus brauntonii Braunton's milk-vetch	FE	--	1B.1	The Braunton's milk-vetch is a perennial herb found in chaparral, coastal scrub, and valley and foothill grassland. It may	A	There are disturbed areas in the BSA; however, there are no sandstone soils with carbonate

				be found in recently burned or disturbed areas; usually in sandstone with carbonate layers. A soil specialist; it requires shallow soils to defeat pocket gophers and also open areas, preferably on hilltops, saddles or bowls between hills. Typical blooming period: January to August Elevation range: 13 to 2,100 feet		layers in the BSA. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Atriplex coulteri Coulter's saltbrush	--	--	1B.2	The Coulter's saltbrush is a perennial herb found in coastal bluff scrub, coastal dunes, coastal scrub, and valley and foothill grassland in clay or alkaline soils. Typical blooming period: March to October Elevation range: 32 to 1,443 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Atriplex parishii Parish's brittescale	--	--	1B.1	The Parish's brittlescale is an annual herb found in chenopod scrub, playas, and vernal pools in alkaline soils. Typical blooming period: June to October Elevation range: 82 to 6,233 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Baccharis malibuensis Malibu baccharis	--	--	1B.1	The Malibu baccharis is a perennial deciduous shrub found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Typical blooming period: August Elevation range: 492 to 1,000 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Calandrinia breweri Brewer's calandrinia	--	--	4.2	The Brewer's calandrinia is an annual herb found in chaparral and coastal scrub in sandy or loamy soils, disturbed sites, and burned areas. Typical blooming period: January to June Elevation range: 32 to 4,002 feet	HP	There are disturbed areas in the BSA; however, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this

						species. Therefore, this species is not expected to be within the BSA.
California macrophylla Round-leaved filaree	--	--	1B.2	The round-leaved filaree is an annual herb found in valley grassland and foothill woodland in clay soils. Typical blooming period: March to May Elevation range: 50 to 3,937 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Calochortus catalinae Catalina mariposa-lily	--	--	4.2	The Catalina mariposa-lily is a perennial bulbiferous herb found in valley and foothill grassland, chaparral, coastal scrub, and cismontane woodland habitats in heavy soils, open slopes, and openings in brush. Typical blooming period: February to June Elevation range: 49 to 2,296 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Calochortus plummerae Plummer's mariposa-lily	--	--	4.2	The Plummer's mariposa-lily is a perennial bulbiferous herb, found in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest. It occurs on rocky and sandy sites, usually of granitic or alluvial material and can be very common after fire. Typical blooming period: May to July Elevation range: 328 to 5,577 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Calochortus weedii var. *intermedius* Intermediate mariposa-lily	--	--	1B.2	The intermediate mariposa-lily is a perennial bulbiferous herb found in chaparral, coastal scrub, and valley and foothill grassland in rocky and calcareous soils.	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for

				Typical blooming period: May to July Elevation range: 344 to 2,805 feet		this species. Therefore, this species is not expected to be within the BSA.
Calystegia felix Lucky morning-glory	--	--	3.1	The lucky morning-glory is an annual rhizomatous herb found in meadows, seeps, and riparian scrub. Typical blooming period: March to September Elevation range: 98 to 705 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Camissoniopsis lewisii Lewis' evening-primrose	--	--	3	The Lewis' evening primrose is an annual herb found in coastal strand, foothill woodland, coastal sage scrub, and valley grassland communities in coastal dunes and coastal scrub habitat. This species is found in sandy or clay soils. Typical blooming period: March to June Elevation range: Zero to 984 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Centromadia parryi ssp. *australis* Southern tarplant	--	--	1B.1	The southern tarplant is an annual herb found in marshes and swamps (margins), valley and foothill grassland, and vernal pools. It is often found in disturbed sites near the coast at marsh edges and also in alkaline soils sometimes with saltgrass. Typical blooming period: May to November Elevation range: Zero to 1,378 feet	A	There are disturbed areas in the BSA; however, the BSA is not within a marsh area near the coast and there are no alkaline soils. In addition, this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Centromadia pungens ssp. *laevis* Smooth tarplant	--	--	1B.1	The smooth tarplant is an annual herb found in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland habitats.	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during

				Typical blooming period: April to September Elevation range: Zero to 2,099 feet		the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	PT	FE	1B.1	The San Fernando Valley spineflower is an annual herb found in coastal scrub and valley and foothill grasslands. This species is found on sandy soils. Typical blooming period: April to July Elevation range: 492 to 4,002 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Chorizanthe polygonoides var. *longispina* Long-spined spineflower	--	--	1B.2	The long-spined spineflower is an annual herb found in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools, often in clay soils. Typical blooming period: April to July Elevation range: 98 to 5,019 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Cladium californicum California saw-grass	--	--	2B.2	The California sawgrass is a perennial rhizomatous herb found in meadows, seeps, and alkaline or freshwater marshes and swamps. Typical blooming period: June to September Elevation range: 196 to 5,249 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Convolvulus simulans Small-flowered morning-glory	--	--	4.2	The small-flowered morning-glory is an annual herb found in chaparral, coastal scrub, and valley and foothill grassland in wet clay and serpentine ridges. Typical blooming period: March to July Elevation range: 98 to 2,427 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be

						within the BSA.
Deinandra paniculata Paniculate tarplant	--	--	4.2	The paniculate tarplant is an annual herb that is found in coastal scrub, valley and foothill grassland, and vernal pools, usually in vernally mesic and sometimes sandy areas. Typical blooming period: March to November Elevation range: 82 to 1,607 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Dodecahema leptoceras Slender-horned spineflower	FE	SE	1B.1	The slender-horned spineflower is an annual herb found in chaparral, cismontane woodland, and coastal scrub in sandy soils. Typical blooming period: April to June Elevation range: 656 to 2,493 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Dudleya multicaulis Many-stemmed dudleya	--	--	1B.2	The many-stemmed dudleya is a perennial herb found in chaparral, coastal scrub, and valley and foothill grassland often in clay soils. Typical blooming period: April to July Elevation range: 49 to 2,591 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Eriastrum densifolium ssp. *sanctorum* Santa Ana River woollystar	FE	SE	1B.1	The Santa Ana River woollystar is a perennial herb found in chaparral and coastal scub alluvial fan habitats in sandy or gravelly soils. Typical blooming period: May to September Elevation range: 298 to 2,001 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.

Harpagonella palmeri Palmer's grapplinghook	--	--	4.2	The Palmer's grapplinghook is an annual herb found in chaparral, coastal scrub, and valley and foothill grassland. This species occurs on clay soils and in open grassy areas within shrubland. Typical blooming period: March to May Elevation range: 66 to 3,133 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Hesperocyparis forbesii Tecate cypress	--	--	1B.1	The tecate cypress is a perennial evergreen tree found in closed-cone coniferous forest and chaparral habitat, in clay, gabbroic, or metavolcanic soils. Typical blooming period: None Elevation range: 262 to 4,921 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Hesperocyparis goveniana Gowen cypress	FT	--	1B.2	The Gowen cypress is a perennial evergreen tree that is found in closed-cone coniferous forest and maritime chaparral habitat. Typical blooming period: None Elevation range: 98 to 984 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Hordeum intercedens Vernal barley	--	--	3.2	The vernal barley is an annual herb found in coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), and vernal pools. Typical blooming period: March to June Elevation range: 16 to 3,280 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Horkelia cuneata var. *puberula* Mesa horkelia	--	--	1B.1	The mesa horkelia is a perennial herb found in chaparral (maritime), cismontane woodland, and coastal scrub habitats in sandy or gravelly soils. Typical blooming period: February to September	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this

				Elevation range: 229 to 2,657 feet		species is not expected to be within the BSA.
Juncus acutus ssp. *leopoldii* Southwestern spiny rush	--	--	4.2	The southwestern spiny rush is a perennial rhizomatous herb found in coastal dunes (mesic), meadows and seeps (alkaline seeps), and marshes and swamps (coastal salt). Typical blooming period: March to June Elevation range: Nine to 2,952 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Juglans californica Southern California black walnut	--	--	4.2	The southern California black walnut is a perennial deciduous tree that is found in chaparral, cismontane woodland, coastal scrub, and riparian woodland on slopes, and in canyons and alluvial habitats. Typical blooming period: March to August Elevation range: 164 to 2,952 feet	P	Two southern California black walnut trees were observed in the BSA to the west of the channel. Therefore, this species is present in the BSA.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	--	--	1B.1	The Coulter's goldfields is an annual herb found in coastal salt marshes and swamps (coastal salt), playas, and vernal pools. Typical blooming period: February to June Elevation range: Three to 4,002 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Lepechinia cardiophylla Heart-leaved pitcher sage	--	--	1B.2	The heart-leaved pitcher sage is a perennial shrub found in closed-cone coniferous forest, chaparral, and cismontane woodland habitats. Typical blooming period: April to July Elevation range: 1,706 to 4,494 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.

Lepechinia gander Gander's pitcher sage	--	--	1B.3	The Gander's pitcher sage is a perennial shrub found in closed-cone coniferous forest, chaparral, coastal scrub, and valley and foothill grassland in gabbroic or metavolcanic soils. Typical blooming period: June to July Elevation range: 1,000 to 3,297 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	--	--	4.3	The Robinson's pepper-grass is an annual herb found in chaparral and coastal scrub. Typical blooming period: January to July Elevation range: Three to 2,903 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Lilium humboldtii ssp. *ocellatum* Ocellated Humboldt lily	--	--	4.2	The ocellated Humboldt lily is a perennial bulbiferous herb found in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland habitats. Typical blooming period: March to August Elevation range: 98 to 5,905 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Monardella australis ssp. *jokerstii* Jokerst's monardella	--	--	1B.1	The Jokerst's monardella is a perennial rhizomatous herb found in chaparral and lower montane coniferous forest. This species is found along steep slopes and along alluvial benches along drainages and washes. Typical blooming period: July to September Elevation range: 4,429 to 5,741 feet	A	There is no suitable habitat in the BSA and the elevation in the BSA is considerably lower than the elevation range where this species is found. Therefore, this species is not expected to be within the BSA.
Monardella hypoleuca ssp. *intermedia*	--	--	1B.3	The intermediate monardella is a perennial rhizomatous herb found in chaparral, cismontane woodland, and	A	There is no suitable habitat for this species in the BSA, and this species was not observed

Intermediate monardella				sometimes in lower montane coniferous forest. This species is usually found in the understory. Typical blooming period: April to September Elevation range: 1,312 to 4,101 feet		during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Muhlenbergia californica California muhly	--	--	4.3	The California muhly is a perennial rhizomatous herb found in chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps in mesic areas and streambanks. Typical blooming period: June to September Elevation range: 328 to 6,561 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Navarretia prostrata Prostrate vernal pool navarretia	--	--	1B.1	The prostrate vernal pool navarretia is an annual herb found in coastal scrub, meadows and seeps, valley and foothill grassland, and vernal pools. Typical blooming period: April to July Elevation range: 10 to 3,969 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Nasturtium gambelii *Gambel's watercress*	FE	ST	1B.1	Gambel's watercress is a perennial rhizomatous herb found in freshwater or brackish marshes and swamps. Typical blooming period: April to October Elevation range: 16 to 1,082 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Nolina cismontane Chaparral nolina	--	--	1B.2	The chaparral nolina is a perennial evergreen shrub found in chaparral and coastal scrub, primarily on sandstone and shale substrates.	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during

				Typical blooming period: March to July Elevation range: 459 to 4,183 feet		the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Penstemon californicus California beardtongue	--	--	1B.2	The California beardtongue is a perennial herb found in chaparral, lower montane coniferous forest, and Pinyon and juniper woodland in sandy soils. Typical blooming period: May to August Elevation range: 3,838 to 7,545 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Pentachaeta aurea ssp. *allenii* Allen's pentachaeta	--	--	1B.1	The Allen's pentachaeta is an annual herb found in coastal scrub (openings) and valley and foothill grassland habitats. Typical blooming period: March to June Elevation range: 246 to 1,706 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Phacelia hubbyi Hubby's phacelia	--	--	4.2	The Hubby's phacelia is an annual herb found in chaparral, coastal scrub, and valley and foothill grassland, primarily on gravelly, rocky, and talus substrate. Typical blooming period: April to July Elevation range: Zero to 3,281 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Phacelia ramosissima var. *austrolitoralis* South coast branching phacelia	--	--	3.2	The South Coast branching phacelia is a perennial herb found in chaparral, coastal dunes, coastal scrub, and coastal salt marshes and swamps. Typical blooming period: March to August Elevation range: 16 to 984 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this

						species is not expected to be within the BSA.
Phacelia stellaris Brand's star phacelia	--	--	1B.1	The Brand's star phacelia is an annual herb found in coastal dunes and coastal scrub. Typical blooming period: March to June Elevation range: Three to 1,312 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Polygala cornuta var. *fishiae* Fish's milkwort				The fish's milkwort is a perennial deciduous shrub found in chaparral, cismontane woodland, and riparian woodland. Typical blooming period: May to August Elevation range: 328 to 3,280 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Pseudognaphalium leucocephalum White rabbit-tobacco	--	--	2B.2	White rabbit-tobacco is a perennial herb found in riparian woodland, cismontane woodland, coastal scrub, and chaparral habitats. This species occurs on sandy, gravelly sites. Typical blooming period: July to December Elevation range: Zero to 6,890 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Quercus engelmannii Engelmann oak	--	--	4.2	The Engelmann oak is a perennial deciduous tree that is found in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland habitats. Typical blooming period: March to June Elevation range: 164 to 4,265 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.

Romneya coulteri Coulter's matilija poppy	--	--	4.2	The Coulter's matilja poppy is a perennial rhizomatous herb found in chaparral and coastal scrub habitats in washes and slopes and often in burned areas. Typical blooming period: March to July Elevation range: 65 to 3,937 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Senecio aphanactis Chaparral ragwort	--	--	2B.2	The chaparral ragwort is an annual herb, found in chaparral, cismontane woodland, and coastal scrub on drying alkaline flats. Typical blooming period: January to April Elevation range: 49 to 2,625 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Sidalcea neomexicana Salt Spring checkerbloom	--	--	2B.2	The salt spring checkerbloom is a perennial herb found in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas. Typical blooming period: March to June Elevation range: 49 to 5,019 feet	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Symphyotrichum defoliatum San Bernardino aster	--	--	1B.2	The San Bernardino aster is a perennial rhizomatous herb found in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland (vernally mesic). Typical blooming period: July to November Elevation range: Six to 6,692 feet	A	There is no suitable habitat in the BSA; therefore, this species is not expected to be within the BSA.
Thysanocarpus rigidus Rigid fringepod	--	--	1B.2	The rigid fringepod is an annual herb found in pinyon and juniper woodlands in dry rocky slopes. Typical blooming period: February to May	A	There is no suitable habitat for this species in the BSA, and this species was not observed during the biological surveys, which were conducted during

				Elevation range: 1,968 to 7,217 feet		the typical blooming period for this species. Therefore, this species is not expected to be within the BSA.
Invertebrates						
Bombus crotchii Crotch bumble bee	--		S1S2	The Crotch bumble bee is found in open grassland and scrub habitats in coastal California east to the Sierra-Cascade crest and south into Mexico. This species nests underground in abandoned rodent burrows. Known food plant genera for the Crotch bumblebee include *Antirrhinum* sp., *Phacelia* sp., *Clarkia* sp., *Dendromecon* sp., *Eschscholzia* sp., and *Eriogonum* sp.	A	There is no suitable habitat in the BSA. This species typically requires open grassland and scrub habitats, which are not present in the BSA. In addition, none of the food plant genera required for this species were observed in the BSA. Therefore, this species is not expected to be within BSA.
Danaus plexippus pop. 1 Monarch – California overwintering population	--		S2S3	The monarch butterfly requires milkweed for breeding and as a food source for larvae. This species roosts in eucalyptus, Monterey pines, and Monterey cypresses in California.	A	There is no suitable habitat in the BSA. This species typically requires milk weed for breeding and eucalyptus trees for roosting, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Diplectrona californica California diplectronan caddisfly	--		S1S2	The California diplectronan caddisfly is found in fast-flowing, cool streams. The larvae of this species live in fixed retreats made from plant materials and spin silken capture nests that filter food particales from the water.	A	There is no suitable habitat in the BSA. This species typically requires fast-flowing streams with plant material, which are not present in the BSA; therefore, this species is not expected to be within the BSA.
Euphydryas editha quino Quino checkerspot butterfly	FE		--	The quino checkerspot butterfly is found in open woody canopy landscapes containing low to moderate levels of nonnative vegetation. Vegetation types that support the Quino checkerspot butterfly include coastal sage scrub, open chaparral, juniper woodland, and native	A	There is no suitable habitat in the BSA. This species typically requires open woody canopy landscapes, which are not present in the BSA; therefore, this species is not expected to be within the BSA.

			grassland. This species is found in localized colonies and is closely associated with the larval food plant, plantain. Adults have been found feeding on the blossoms of chia (*Salvia columbariae*).		
Crustaceans					
Branchinecta sandiegonensis San Diego fairy shrimp	FE	--	The San Diego fairy shrimp is found vernal pools in chaparral, coastal scrub, vernal pool, and wetland habitats. This species is endemic to San Diego and Orange County mesas.	A	There is no suitable habitat in the BSA. This species typically requires vernal pools, which are not present in the BSA; therefore, this species is not expected to be within the BSA.
Mollusks					
Anodonta californiensis California floater	--	S4	The California floater is a mollusk typically found in lakes, reservoirs, and slow-moving streams with mud or sand substrates, although they have also been found in rivers and creeks with gravel substrate. This species is found at low elevations and requires host fish to reproduce and disperse. The California floater is vulnerable to water level fluctuations and is threatened by diversion of water for irrigation, water supply, and power generation.	A	There is no suitable habitat in the BSA. This species typically requires lakes, reservoirs, or slow-moving streams with mud or sand substrates, and host fish, which are not present in the BSA; therefore, this species is not expected to be within the BSA.
Gonidea angulata Western ridged mussel	--	S4	The western ridged mussel is found primarily in creeks and rivers and less often in lakes. This species was historically found in most of California, but has been extirpated from central and southern California.	A	This species has been extirpated from southern California. Therefore, this species is not expected to be within the BSA.
Amphibians					

Anaxyrus californicus Arroyo toad	FE	SSC	The arroyo toad is found in semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. This species is found near rivers with sandy banks, willows, cottonwoods, and sycamores; and in loose, gravelly areas of streams in drier parts of the range.	A	The BSA is outside of the current known range for this species; therefore, this species is not expected to be within the BSA.
Lithobates pipiens Northern leopard frog	--	SSC	The Northern leopard frog is found in various water sources including freshwater marshes, swamps, wetlands, canals, and lakes with rooted aquatic vegetation. During summer months this species commonly inhabits wet meadows and fields and will overwinter underwater. This species requires shoreline cover with submerged and emergent vegetation. The northern leopard frog will lay eggs on vegetation just below the surface in shallow, permanent water sources. Within California, extant populations are found in parts of Siskiyou, Modoc, Shasta, Lassen, Tehama, Plumas, Sierra, El Dorado, Alpine, Mono, Inyo, Tulare, Kern, Ventura, Riverside, and Orange counties.	A	There is no suitable habitat in the BSA. This species typically requires a permanent water source with rooted aquatic vegetation and wet meadows and fields, which are not present in the BSA; therefore, this species is not expected to be within the BSA.
Rana boylii Foothill yellow-legged frog	--	SSC	The foothill yellow-legged frog is found in partly shaded, shallow streams and riffles with rocky substrate in a variety of habitats. This species requires cobble-sized substrate for egg-laying and needs at least 15 weeks to attain metamorphosis. The extant range of the foothill yellow-legged frog is known from the Pacific drainages from the upper reaches of the Willamette River system in Oregon, south to the upper San Gabriel River in Los Angeles County.	A	The BSA is outside of the current known range for this species; therefore, this species is not expected to be within the BSA.

Rana draytonii California red-legged frog	FT	SSC	The California red-legged frog is found from sea level to elevations of about 1,500 meters (5,200 feet). It has been extirpated from 70 percent of its former range and now is found primarily in coastal drainages of central California, from Marin County, California, south to northern Baja California, Mexico. This species is found in or near permanent sources of deep water with dense, shrubby, or emergent vegetation, including *Typha* sp., *Scirpus* sp., and *Salix* sp. This species requires 11 to 20 weeks of permanent water for larval development and may estivate small mammal burrows, leaf litter, or other moist sites in or near riparian areas.	A	There is no suitable habitat in the BSA. This species typically requires a permanent source of deep water with dense, shrubby, or emergent vegetation, which is not present in the BSA; therefore, this species is not expected to be within the BSA.
Spea hammondii Western spadefoot	--	SSC	The western spadefoot is found in open areas with sandy or gravelly soils in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, foothills, and mountains. This species is fossorial, and breeds in temporary rain pools and slow-moving streams. It also breeds in stock tanks and other artificial water bodies as long as the surrounding habitat is not developed for human settlement or irrigated agriculture. This species breeds in pools that do not contain bullfrogs, fish, or crayfish.	A	There is no suitable habitat in the BSA. This species typically requires open areas with sandy or gravelly soils and temporary pools for breeding near areas that are undeveloped, which are not present in the BSA; therefore, this species is not expected to be within the BSA.
Taricha torosa Coast Range newt	--	SSC	The coast range newt is found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used. Breeding takes place in ponds, reservoirs, and streams. Terrestrial individuals will migrate up to 0.25 mile to upland habitat. This species is found	A	The BSA is outside of the current known range for this species; therefore, this species is not expected to be within the BSA.

			along the coast ranges of California from Mendocino County southward to Los Angeles County and disjunctly south to the Cayumaca Mountains n San Diego County.		
Fish					
Catostomus santaanae Santa Ana sucker	FT	--	The Santa Ana sucker is endemic to Los Angeles Basin south coastal streams. This species is a habitat generalist, but prefers sand-rubble-boulder bottoms, cool, clear water, and algae. The Santa Ana sucker is typically found in shallow, narrow streams, with high water quality (unpolluted water) and water temperatures less than 71 degrees Fahrenheit (USFWS, 2011). This species prefers permanent streams with pools and riparian vegetation that provide cover and refuge from floods.	A	Carbon Canyon Creek does not have a sand, rubble, or boulder bottom and there is no riparian vegetation to provide cover or refuge from floods; therefore, there is no suitable habitat for this species in the BSA and this species is not expected tobe within the BSA.
Gila orcuttii Arroyo chub	--	SSC	The arroyo chub is native to streams from Malibu Creek to the San Luis Rey River basin. This species was introduced into streams in Santa Clara, Ventura, Santa Ynez, Mohave and San Diego river basins. This species is found in slow water stream sections with mud or sand bottoms, and feeds heavily on aquatic vegetation and associated invertebrates.	A	Carbon Canyon Creek does not have a mud or sand bottom and there is no vegetation within Carbon Canyon Creek; therefore, there is no suitable habitat for this species in the BSA and this species is not expected to be within the BSA.
Oncorhynchus mykiss Southern California Steelhead Distinct Population Segment (DPS)	FE	--	The Southern California Steelhead DPS is found between the Santa Maria River and the San Mateo Creek in San Diego County in seasonally accessible rivers and streams. This species requires cool, clean water with natural cover such as submerged and overhanging large wood, and rocks and boulders.	A	Carbon Canyon Creek is a concrete-lined channel and does not have natural cover including submerged or overhanging wood, rocks, or boulders; therefore, there is no suitable habitat for this species in the BSA and this species is not expected to be within the

					BSA.
Rhinichthys osculus ssp. 3 Santa Ana speckled dace	--	SSC	The Santa Ana speckled dace is found in perennial streams fed by cool springs that maintain summer water temperatures below 68 degrees Fahrenheit. This species is found in streams with gravel, cobble, sand, or boulder substrates. The Santa Ana speckled dace is found in the headwaters of the Santa Ana and San Gabriel rivers and may be extirpated from the Los Angeles River system.	A	Carbon Canyon Creek does not have gravel, cobble, sand, or boulder substrates; therefore, there is no suitable habitat for this species in the BSA.
Reptiles					
Anniella pulchra pulchra Silvery legless lizard	--	SSC	The silvery legless lizard is found in moist, warm loose soils with plant cover, and moisture is essential. This species is found in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. This species is also found in Riversidean Alluvial Fan Sage Scrub.	A	There is no suitable habitat in the BSA. This species typically requires moist, loose soils with plant cover, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Arizona elegans occidentalis California glossy snake	--	SSC	The California glossy snake is found in arid scrub, rocky washes, and chaparral habitat. This species is nocturnal and hides in burrows underground during the day. The California glossy snake preys on sleeping diurnal lizards, small snakes, birds, and small mammals.	A	There is no suitable habitat in the BSA. This species typically requires arid scrub, rocky washes, and chaparral habitat, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Aspidoscelis hyperythra Orange-throated whiptail	--	WL	The orange-throated whiptail is found in low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. This species prefers washes and other sandy areas with patches of brush and rocks. The primary food source for the orange-throated whiptail is termites.	A	There is no suitable habitat in the BSA. This species typically requires coastal scrub, chaparral, or hardwood habitats, which are not present in the BSA. Therefore, this species is not expected to be

					within the BSA.
Aspidoscelis tigris stejnegeri Coastal whiptail	--	SSC	The coastal whiptail is found primarily in hot and dry open areas with sparse foliage, including chaparral, woodland, and riparian areas. This species is also found in woodland and riparian areas where the ground may be firm soil, sandy, or rocky.	HP	There are dry, open areas at the top of the Carbon Canyon Creek Channel banks that could provide suitable habitat for the coastal whiptail. Therefore, there is potential for this species to be within the BSA.
Crotalus ruber Red-diamond rattlesnake	--	SSC	The red-diamond rattlesnake is found in chaparral, Mojavean desert scrub, and Sonoran desert scrub. This species is found in rocky areas and dense vegetation and requires rodent burrows or objects for cover.	A	There is no suitable habitat in the BSA. This species typically requires rocky areas with dense vegetation, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Diadophia punctatus modestus San Bernardino ringneck snake	--	S4	The San Bernardino ringneck snake is most commonly found in moist habitats, including wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands. This species avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation. The San Bernardino ringneck snake is usually found under the cover of rocks, wood, bark, boards, or other surface debris. This species feeds on small salamanders, tadpoles, small frogs, small snakes, lizards, worms, and insects.	A	There is no suitable habitat in the BSA. This species typically requires moist areas with ample surface cover which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Diadophis punctatus similis San Diego ringneck snake	--	S4	The San Bernardino ringneck snake is found in wet meadows, rocky hillsides, gardens, farmland, grassland, chaparral, mixed coniferous forests, and woodlands in moist habitats.	A	There is no suitable habitat in the BSA. In addition, the BSA is outside of the current known range for this species, and this species is not expected to be in within the BSA.

Emys marmorata Western pond turtle	--	SSC	The western pond turtle is found in slow moving rivers, streams, lakes, ponds, wetlands, reservoirs, and brackish estuarine waters. This species prefers areas that provide logs, algae, or vegetation for cover, and boulders for basking, and is found below 6,000 feet elevation.	A	Carbon Canyon Creek does not have logs, algae, or boulders for cover or basking and there is no suitable upland habitat within or adjacent to the BSA; therefore, there is no suitable habitat for this species in the BSA and this species is not expected to be within BSA.
Phrynosoma blainvillii Coast horned lizard	--	SSC	The coast horned lizard is found in open areas of sandy soil and low vegetation in valleys, foothills, and semiarid mountains. This species is also found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Key habitat elements for this species are loose, fine soils, with a high sand content; an abundance of native ants; open areas for basking; and areas with low dense shrubs for refuge.	A	There is no suitable habitat in the BSA. This species typically requires loose soils with a high sand content and an abundance of native ants, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Plestiodon skiltonianus interparietalis Coronado skink	--	WL	The Coronado skink is found in grasslands, woodlands, pine forests, and chaparral, and is generally found in open sunny areas such as clearings and at the edges of creeks and rivers. This species prefers rocky areas near streams with lots of vegetation. The Coronado skink can also be found in areas away from water. This species is currently found in inland southern California in Riverside and San Diego counties.	A	There is no suitable habitat in the BSA. In addition, the BSA is outside of the current known range for this species, and this species is not expected to be in within the BSA.
Salvadora hexalipis virgultea Coast patch-nosed snake	--	SSC	The coast patch-nosed snake is found in semi-arid brushy areas and chaparral in canyons, rocky hillsides, and plains. This species requires small mammal burrows for refuge and overwintering sites. The coast patch-nosed snake feeds on lizards, small mammals, and amphibians.	A	There is no suitable habitat in the BSA. This species typically requires semi-arid brushy areas and a suitable prey base, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.

Thamnophis hammondii Two-striped gartersnake	--	SSC	The two-striped garter snake is found in coastal California from the vicinity of Salinas to northwest Baja California. This species is highly aquatic, found in or near permanent fresh water. This species is often found along streams with rocky beds and riparian growth, and has an elevational range from sea level to about 7,000 feet.	A	Carbon Canyon Creek does not have a rocky bed and there is no vegetation along the banks. In addition, there is no suitable upland habitat within or adjacent to the BSA; therefore, there is no suitable habitat for this species in the BSA and this species is not expected to be within the BSA.
Thamnophis sirtalis ssp. South coast gartersnake	--	SSC	The south coast garter snake is found in marsh and upland habitats near permanent water and riparian vegetation. This species is found within the southern California coastal plain from Ventura county to San Diego county.	A	There is no suitable habitat in the BSA. This species typically requires marsh and upland habitat near permanent water and riparian vegetation, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Birds					
Accipiter cooperii Cooper's hawk	--	WL	The Cooper's hawk is found in cismontane woodland, riparian forest, riparian woodland, and upper montane coniferous forest. This species nests mainly in riparian growths of deciduous trees, often in canyon bottoms on river floodplains, and will also nest in live oaks. The Cooper's hawk has increasingly been found nesting in suburbs and cities where there are tall trees for nest sites.	HP (Nesting and Foraging)	This species was observed flying over the BSA and there is marginally suitable habitat in the BSA. There are large trees along the adjacent propertly lines east and west of the creek that could provide nesting habitat for the Cooper's hawk. Therefore, there is potential for this species to be within the BSA.
Accipiter striatus Sharp-shinned hawk	--	WL	The sharp-shinned hawk is found in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats in riparian areas. This species is found on north-facing slopes and nests usually within 275 feet of water and requires dense forests, ideally with	A	There is no suitable habitat in the BSA. This species typically requires dense forests within 275 feet of water, which are not present in or adjacent to the BSA. Therefore, this species is not expected to be within the

			closed-canopies.		BSA.
Agelaius tricolor Tricolored blackbird	--	SE	The tricolored blackbird is a highly colonial species that is found in freshwater marshes dominated by cattails and bulrushes. This species requires open water, protected nesting substrate, and foraging areas with insect prey within one mile of the colony.	A	There is no suitable habitat in the BSA. This species typically requires freshwater marshes dominated by cattails and bulrushes, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	--	WL	The California rufous-crowned sparrow is a resident in Southern California coastal sage scrub and sparse mixed chaparral. This species frequents relatively steep, often rocky hillsides with grass and forb patches.	A	There is no suitable habitat in the BSA. This species typically requires coastal sage scrub and rocky hillsides, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Ammodramus savannarum Grasshopper sparrow	--	SSC	The grasshopper sparrow is found in dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Loosely colonial when nesting, this species favors native grasslands with a mix of grasses, forbs and scattered shrubs.	A	There is no suitable habitat in the BSA. This species typically requires dense grasslands and native habitats, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Aquila chrysaetos Golden eagle	--	FP	The golden eagle is found in open and semi-open county with native vegetation and primarily found in mountains, canyons, and riverside cliffs and bluffs. This species avoids developed areas and uninterrupted stretches of forest. Cliff-walled canyons and large trees provide nesting habitat in most parts of their range.	A	There is no suitable habitat in the BSA. The BSA is within an urban, developed area, and there are no open natural communities present. The Golden eagle is sensitive to human disturbance and is unlikely to nest in areas of high human activity. Therefore, this species is not expected to be within the BSA.
Ardea alba Great egret	--	S4	The great egret is found in brackish marsh, estuary, freshwater marsh, riparian forests, and wetlands. This species nests	A (Nesting) HP	There is no suitable nesting habitat in the BSA; however, there is suitable foraging

			colonially in large trees. The rookery sites are located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes. The great egret feeds mainly on small fish, but will also eat amphibians, reptiles, small mammals, and invertebrates.	(Foraging)	habitat. Therefore, there is potential for this species to forage within the BSA, but this species is not expected to nest within the BSA.
Ardea herodias Great blue heron	--	S4	The great blue heron nests colonially in tall trees, cliff sides, and sequestered spots on marshes. This species forages in marshes, lake margins, tide flats, rivers, streams, and wet meadows. The rookery sites are in close proximity to foraging areas.	A (Nesting) HP (Foraging)	There is no suitable nesting habitat in the BSA; however, there is suitable foraging habitat. Therefore, there is potential for this species to forage in the BSA, but this species is not expected to nest within the BSA.
Artemisiospiza belli belli Bell's sage sparrow	--	WL	The Bell's sage sparrow nests in chaparral dominated by fairly dense stands of chamise. This species is found in coastal sage scrub in the southern end of their range. Nests are located on the ground beneath a shrub or in a shrub six to 18 inches above ground with territories about 50 yards apart.	A	There is no suitable habitat in the BSA. This species typically requires chaparral or coastal sage scrub, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Asio otus long-eared owl	--	SSC	The long-eared owl is found in riparian habitats with willows, cottonwoods, and live oaks along stream courses. This species requires adjacent open land with mice for foraging, and old crow, hawk, or magpie nests for breeding.	A	There is no suitable habitat in the BSA. This species typically requires riparian habitat adjacent to open land for foraging, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Athene cunicularia Burrowing owl	--	SSC	The burrowing owl is found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species is a subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. Also common	A	There is no suitable habitat in the BSA. This species typically requires open grasslands with ground squirrel burrows, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.

			in disturbed areas, including roadsides, and may develop burrows in debris piles.		
Baeolophus inornatus Oak titmouse	--	S4	The oak titmouse is found in warm, open, dry oak, oak-pine, or pinyon-juniper woodlands and will use scrub oaks or other brush as long as woodlands are nearby. This species nests in natural tree cavities or woodpecker holes.	A	There is no suitable habitat in the BSA. This species typically requires oak, pines, pinyon - juniper, or other shrubs near woodland habitat, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Branta bernicla Brant	--	SSC	Brants are found around salt bays, estuaries, and tundras (summer). Migrants may make regular stopovers on freshwater lakes in the interior of the continent.	A	There is no suitable habitat in the BSA. This species typically requires salt bays, estuaries, or tundras, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Buteo swainsoni Swainson's hawk	--	ST	The Swainson's hawk forages in prairies, grasslands, and agricultural fields that support rodent populations. This species nests in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees.	A	There is no suitable habitat in the BSA. This species typically requires prairies, grasslands, and agricultural fields that support rodent populations, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Calypte costae Costa's hummingbird	--	S4	The Costa's hummingbird is found in desert washes, and sage scrub habitat, mostly in dry and open areas such as washes and streamsides in the Sonoran desert and lower parts of dry canyons. In California, may also use various chaparral and riparian areas. Dominant species may include chamise, laurel sumac, buckwheat, California lilac, and coffeeberry. This species nests in sparsely leaved shrubs or small trees, and sometimes in yucca or cactus.	A	There is no suitable habitat in the BSA. This species typically requires dry open areas with chaparral and sage scrub habitat, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.

Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	--	SSC	The coastal cactus wren, San Diego subspecies, has a limited range, extending from northwestern Baja California north through the coastal lowlands of San Diego and southern Orange County. This species is found in thickets of chollas (*Optunia prolifera*), or prickly-pear cacti (*Optunia littoralis*, *Optunia aricola*), tall enough to support and protect nests.	A	There is no suitable habitat in the BSA. This species typically requires chollas or prickly-pear cacti, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Chaetura vauxi Vaux's swift	--	SSC	The Vaux swift is found in redwood, douglas-fir, and other coniferous forests. This species nests in large hollow trees and snags, and will often nest in flocks. The Vaux swift shows a preference for foraging over rivers and lakes and feeds low over water.	A	There is no suitable habitat in the BSA. This species typically requires coniferous forests and large hollow trees, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Charadrius montanus Mountain plover	--	SSC	The mountain plover is found in short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. This species is found in short vegetation, bare ground and flat topography. The mountain plover prefers grazed areas as well as areas with burrowing rodents. This species nests mostly in short-grass prairie, including overgrazed pasture and very arid plains.	A	There is no suitable habitat in the BSA. This species typically requires short grasslands, overgrazed pastures, and open areas with short vegetation, which are not present in the BSA. Therefore, this species is not expected to be in within the BSA.
Circus cyaneus Northern harrier	--	SSC	The northern harrier is found in coastal salt and fresh-water marsh habitat. This species nests on the ground in shrubby vegetation, usually at marsh edges. Nests are built of a large mound of sticks in wet areas. This northern harrier feeds on small mammals and birds.	A	There is no suitable habitat in the BSA. This species typically requires marsh habitat, which is not present in the BSA. Therefore, this species is not expected to be in within the BSA.
Coccyzus americanus occidentalis Western yellow-billed	FT	SE	The Western yellow-billed cuckoo breeds in large blocks, or contiguous areas of riparian habitat, primarily cottonwood-willow riparian woodlands. Optimum	A	There is no suitable habitat in the BSA. This species typically requires large areas of contiguous riparian habitat,

cuckoo			patches are greater than 200 acres in size and wider than 1,950 feet. Sites smaller than 50 to 100 acres in size and 325 to 65 feet wide are not suitable. This species forages on caterpillars and large insects, and occasionally on small lizards, frogs, eggs, and young birds.		which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Contopus cooperi Olive-sided flycatcher	--	SSC	The olive-sided flycatcher is found in lower and upper montane coniferous forests and redwood forests. This species is most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes, or other open terrain. This species nests in mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pines.	A	There is no suitable habitat in the BSA. This species typically requires coniferous and redwood forests, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Coturnicops noveboracensis Yellow rail	--	SSC	The yellow rail is found in shallow marshes and wet meadows. During the winter, this species is found in drier fresh-water and brackish marshes, as well as dense, deep grass, and rice fields. During the summer, the yellow rail is found in large wet meadows or shallow marshes dominated by sedges and grasses.	A	There is no suitable habitat in the BSA. This species typically requires marshes and wet meadows, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Egretta thula Snowy egret	--	S4	The snowy egret is found in marshes and swamps, meadows and seeps, riparian forest, riparian woodland, and wetlands. This species is a colonial nester with nest sites situated in protected beds of dense tules or within trees or shrubs five to 10 feet up from the ground. Rookery sites are situated close to foraging areas. The snowy egret generally forages in mudflats, beaches, and wetlands, but will also forage in wet agricultural fields and along the edges of rivers and lakes.	A	There is no suitable habitat in the BSA. This species typically requires marshes, swamps, meadows, seeps, riparian forest, wetlands, or agricultural areas, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Elanus leucurus	--	FP	The white-tailed kite is found in rolling foothills and valley margins with scattered	A	There is no suitable habitat in the BSA. This species typically

White-tailed kite			oaks and river bottomlands or marshes next to deciduous woodland. This species favors open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching. The white-tailed kite feeds mostly on small mammals, but has also been observed feeding on birds, lizards, and insects.		requires scattered oaks or marshes next to deciduous woodland, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Empidonax traillii Willow flycatcher	--	SE	The willow flycatcher is found in meadows and seeps, riparian scrub, riparian woodland, and wetland habitats. This species requires dense willow thickets for nesting and low, exposed branches as hunting perches. The willow flycatcher is found at 2,000 to 8,000 feet elevation.	A	There is no suitable habitat in the BSA. This species typically requires dense willow thickets, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Empidonax traillii extimus Southwestern willow flycatcher	FE	SE	The southwestern willow flycatcher is found in riparian habitats along rivers, streams, or other wetlands with vegetation for nesting and foraging.	A	There is no suitable habitat in the BSA. This species typically requires riparian habitat for nesting and foraging, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Eremophila alpestris actia California horned lark	--	WL	The California horned lark is found in coastal regions, chiefly from Sonoma County to San Diego County. This species is also found in the main part of San Joaquin Valley and east to the foothills. The California horned lark is found in short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats, usually where trees and large shrubs are absent. This species nests on the ground in hollows next to grass tufts or clods of earth.	A	There is no suitable habitat in the BSA. This species typically requires short-grass prairie, “bald” hills, mountain meadows, open coastal plains, and fallow grain fields where trees and large shrubs are lacking; which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Falco columbarius merlin	--	WL	The merlin is found in open woodland, grasslands, savannahs, coastal areas, farms, ranches, and along rivers. This	HP (Nesting and	There is marginally suitable habitat in the BSA. There are large trees along the adjacent

			species requires clumps of trees or windbreaks for roosting and nests near forested openings, in fragmented woodlands, near rivers, lakes, or bogs and on lake islands. Merlins will lay their eggs in abandoned crow or hawk nests within conifers or deciduous trees.	Foraging)	propertly lines east and west of the creek that could provide nesting habitat for the merlin Therefore, there is potential for this species to be within the BSA.
Falco mexicanus Prairie falcon	--	WL	The prairie falcon is found in grasslands, shrubby deserts, shrub-steppe (a low rainfall grassland) and other open areas up to about 10,000 feet elevation. In the winter, the majority of this species are found in the Great Plains and Great Basin, where they feed mostly on other birds such as horned larks and meadowlarks. In the summer, this species eats mostly small mammals, such as ground squirrels, pikas, birds, and insects. The prairie falcon nests on ledges, cavities, and crevices of cliff faces, or uses abandoned nests of eagles, hawks, or ravens.	A	There is no suitable habitat in the BSA. This species typically requires grasslands, deserts, and other open areas with cliff faces, or ledges for nesting, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Falco peregrinus anatum American peregrine falcon	DL	FP	The American peregrine falcon breeds in open habitats from tundra and seacoasts to high mountains and open forested regions, where there are rocky cliffs with ledges overlooking rivers, lakes, or coastal bays that have abundant birds. This species typically nests on ledges of large cliff faces, but will also nest on city buildings, bridges, and tree cavities of coastal redwoods.	A	There is no suitable habitat in the BSA. This species typically requires open habitats with cliffs, tree cavities, or large bridges for nesting, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Haliaeetus leucocephalus Bald eagle	FD	FP	The bald eagle is found in old growth lower montane coniferous forest along ocean shore, lake margins, and rivers for both nesting and wintering. Most nests are within one mile of water. This species nests in large, old-growth, or dominant live trees with open branches, especially	A	There is no suitable habitat in the BSA. This species typically requires old growth forests with large trees for nesting and fish as a main prey source, which are not present in the BSA. Therefore, this species is not

			ponderosa pine. The bald eagle roosts communally in winter. This species mainly feeds on fish, but will also eat birds, reptiles, amphibians, and invertebrates.		expected to be within the BSA.
Icteria virens Yellow-breasted chat	--	SSC	The yellow-breasted chat is found in dense second-growth riparian thickets and brush. This species nests in very dense scrub often along streams and at the edges of swamps or ponds.	A	There is no suitable habitat in the BSA. This species typically requires dense riparian thickets, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Lanius ludovicianus Loggerhead shrike	--	SSC	The loggerhead shrike is found in semi-open country with lookout posts, such as wires, trees, and scrub. This species builds nests in thorny vegetation in semi-open terrain, from large clearings in wooded regions to open grassland or desert with a few scattered trees or large shrubs. This species prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	A	There is no suitable habitat in the BSA. This species typically requires thorny vegetation near open land, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Larus californicus California gull	--	WL	The California gull is found along littoral waters, sandy beaches, waters and shorelines of bays, tidal mud-flats, marshes, lakes, etc. This species is a colonial nester on the ground near lakes or marshes, often on islands.	A (Nesting) HP (Foraging)	There is no suitable nesting habitat in the BSA; however, there is suitable foraging habitat. Therefore, there is potential for this species to forage in the BSA, but this species is not expected to nest within the BSA.
Laterallus jamaicensis coturniculus California black rail	--	FP	The California black rail is found in freshwater marsh, wet meadows, and shallow margins of saltwater marshes bordering larger bays. This species requires water depths of about one inch that do not fluctuate during the year, and dense vegetation for nesting habitat. Typical associated vegetation includes	A	There is no suitable habitat in the BSA. This species typically requires marshes with dense vegetation, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.

			pickleweed in saltmarshes and bulrush in less saline habitats. California black rails forage in the same habitat they use for breeding.		
Nycticorax nycticorax Black-crowned night heron	--	WL	The black-crowned night heron is a colonial nester, nesting usually in trees in riparian woodland and forest habitat, and occasionally in tule patches. Rookery sites are located adjacent to foraging areas: lake margins, mud-bordered bays, and marshy spots.	A	There is no suitable habitat in the BSA. This species is found in riparian woodlands, forests, and areas with tule patches, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Pandion haliaetus osprey	--	WL	The osprey is found along ocean shores, bays, fresh-water lakes, and riparian forest along larger streams. This species builds large nests in tree-tops within 15 miles of a good fish-producing body of water.	A	There is no suitable habitat in the BSA. This species is found along ocean shores, bays, fresh-water lakes, and riparian forest along larger streams, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Passerculus sandwichensis beldingi Belding's savannah sparrow	--	SE	The Belding's savannah sparrow is found in the upper littoral region of salt marshes and nest preferentially in pickleweed (*Salicornia virginica*).	A	There is no suitable habitat in the BSA. This species typically requires salt marshes with pickleweed, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Phalacrocorax auritus Double-crested cormorant	--	WL	The double-crested cormorant is a colonial nester on coastal cliffs, offshore islands, riparian forest, and scrub or woodland habitat near lake margins. This species builds nests near water on cliff ledges, on the ground on islands, or at any height in trees. The double-crested cormorant feeds on fish and other aquatic life near the mid to upper levels of the water.	A	There is no suitable habitat in the BSA. This species typically requires coastal cliffs, offshore islands, riparian forest, and scrub or woodland habitat near lake margins, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.

Piranga rubra Summer tanager	--	SSC	The summer tanager breeds in low-elevation willow and cottonwood woodlands, and in higher-elevation mesquite and saltcedar stands. This species builds cup nests within a cluster of leaves or a fork of branches overhanding a road, creekbed, or treefall gap in the forest.	A	There is no suitable habitat in the BSA. This species typically requires willows, cottonwoods, mesquite, or salt cedar stands, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Plegadis chihi White-faced ibis	--	WL	The white-faced ibis is found in marshes, irrigated land, and tules. This species forages in shallow water including marshes, flooded pastures, and irrigated fields. The white-faced ibis breeds in colonies in areas of dense marsh or in low shrubs or trees above water.	A	There is no suitable habitat in the BSA. This species typically requires marshes, irrigated land, and tules, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Polioptila californica californica Coastal California gnatcatcher	FT	SSC	The coastal California gnatcatcher is found in chaparral, grassland, and riparian areas near sage scrub. An obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California, this species requires variable amounts of semi-open sage scrub dominated by California sagebrush on shallow slope gradients.	A	There is no suitable habitat in the BSA. This species typically requires riparian areas near sage scrub, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Polioptila melanura Black-tailed gnatcatcher	--	WL	The black-tailed gnatcatcher is found primarily in wooded desert wash habitats and desert scrub including Mojavean desert scrub and Sonoran desert scrub. This species nests in desert washes containing mesquite, paloverde, ironwood, and acaia and is absent in areas where salt cedar is introduced.	A	There is no suitable habitat in the BSA. This species typically requires desert scrub, which is not present in the BSA. Therefore, this species is not expected to be within the BSA.
Pyrocephalus rubinus Vermilion flycatcher	--	SSC	The vermilion flycatcher is found in marshes, swamps, riparian forest, riparian scrub, riparian woodland, and wetland habitats. This species nests in cottonwoods, willows, mesquite, and other	A	There is no suitable habitat in the BSA. This species typically requires large desert riparian trees near mesic areas, which are not present in the BSA. Therefore, this species is not

			large desert riparian trees near mesic areas.		expected to be within the BSA.
Riparia riparia Bank swallow	--	ST	The bank swallow is a colonial nester, and nests primarily in riparian and other lowland habitats west of the desert. This species requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean for nesting.	A	There is no suitable habitat in the BSA. This species typically requires vertical banks or cliffs for nesting, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Rynchops niger Black skimmer	--	SSC	The black skimmer is found along ocean beaches and tide waters. This species favors coastal waters protected from open surf, such as lagoons, estuaries, inlets, and sheltered bays. The black skimmer nests on gravel bars, low islets, and sandy beaches in unvegetated sites.	A	There is no suitable habitat in the BSA. This species typically requires gravel bars, sandy beaches, and areas near coastal waters, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Selasphorus rufus Rufous hummingbird	--	S4	The rufous hummingbird typically breeds in open or shrubby areas, forest openings, yards, and parks, and sometimes in forests, thickets, swamps, and meadows from sea level to approximately 6,000 feet. This species winters mostly in pine-oak woods in Mexico.	HP (Nesting and Foraging)	There is marginally suitable habitat in the BSA. There are shrubs and small trees within the BSA that could provide nesting habitat for the rufous hummingbird. Therefore, there is potential for this species to be within the BSA.
Setophaga petechia Yellow warbler	--	SSC	The yellow warbler is found in riparian forest, riparian scrub, and riparian woodland habitats in close proximity to water. This species is frequently found nesting and foraging in willow shrubs and thickets, and can also be found in cottonwoods, sycamores, ash, and alders.	A	There is no suitable habitat in the BSA. This species is found in riparian habitats, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Spinus lawrencei Lawrence's goldfinch	--	S3S4	The Lawrence's goldfinch is found in broadleaved upland forest, chaparral, pinon and juniper woodlands, and riparian woodland habitats. This species nests in open oak and other arid woodlands and	A	There is no suitable habitat in the BSA. This species typically requires woodland or chaparral habitat near water, which is not within or adjacent to the BSA.

			chaparral habitats near water.		Therefore, this species is not expected to be in within the BSA.
Sternula antillarum browni California least tern	FE	FP	The California least tern nests in sparsely vegetated sandy or gravelly ground (typically tidal flats and beaches) near lagoons, estuaries, or bays.	A	There is no suitable habitat in the BSA. This species typically requires sandy or gravelly areas near lagoons, estuaries, or bays, which are not within or adjacent to the BSA. Therefore, this species is not expected to be in within the BSA.
Vireo bellii pusillus Least Bell's vireo	FE	SE	The least Bell's vireo is found in dense, willow dominated riparian habitat with lush understory vegetation. This species is a summer resident of Southern California in low riparian areas in the vicinity of water or in dry river bottoms below 2,000 feet Least Bell's vireo nests are placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, and mesquite.	A	There is no suitable habitat in the BSA. This species typically requires areas of dense willow, which are not within or adjacent to the BSA. Therefore, this species is not expected to be within the BSA.
Xanthocephalus xanthocephalus Yellow-headed blackbird	--	SSC	The yellow-headed blackbird nests in freshwater emergent wetlands often along borders of lakes or ponds with dense vegetation and deep water. This species only nests where large insects such as Odonata are abundant and nesting is timed with maximum emergence of aquatic insects. Nests are lashed to standing vegetation growing in water, usually no more than three feet above the water's surface. This species forages on the ground in open fields, near the edge of water, and in low marsh vegetation.	A	There is no suitable habitat in the BSA. This species typically requires wetlands and large aquatic insects, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Mammals					
Antrozous pallidus Pallid bat	--	SSC	The pallid bat is found in arid locations in rocky, mountainous areas near water or	A	There is no suitable habitat in the BSA. This species requires

			open, sparsely vegetated grasslands. Day roosts are in caves, crevices, mines, and occasionally in hollow trees, buildings, and bridges. Roost must protect bats from high temperatures. Bats move deeper into cover if temperatures rise. Night roosts may be in more open sites, such as porches and open buildings. The pallid bat is highly sensitive to disturbance.		caves, crevices, buildings, and hollow trees for roosting, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Chaetodipus fallax fallax Northwestern San Diego pocket mouse	--	SSC	The northwestern San Diego pocket mouse is found in chaparral, grasslands, scrub forests, and desert habitats. This species requires low-growing vegetation or rocky outcroppings, and sandy soil to dig burrows.	A	There is no suitable habitat in the BSA. This species typically requires sandy soil, with low-growing vegetation or rocky outcroppings, which are not present within the BSA. Therefore, this species is not expected to be within the BSA.
Choeronycteris mexiacna Mexican long-tongued bat	--	SSC	The Mexican long-tongued bat is found in pinyon and juniper woodlands, riparian scrub, and Sonoran thorn woodlands and roosts in well-lit caves and in buildings. This species feeds on nectar and pollen of night-blooming succulents.	A	There is no suitable habitat in the BSA. In addition, the BSA is outside of the known range for this species, and this species is not expected to be within the BSA.
Dipodomys merriami parvus San Bernardino kangaroo rat	FE	SSC	The San Bernardino kangaroo rat is found in alluvial scrub/coastal sage scrub habitats on gravelly and sandy soils adjacent to rivers and streams.	A	There is no suitable habitat in the BSA. This species typically requires alluvial scrub/coastal sage scrub habitat with gravelly or sandy soils, which are not present within the BSA. Therefore, this species is not expected to be within the BSA.
Eumops perotis californicus Western mastiff bat	--	SSC	The western mastiff bat is a cliff dwelling species that generally roosts under rock slabs or crevices in large boulders or buildings. This species is not known to roost in bridges, although some potential exists. This species forages in dry desert washes, flood plains, chaparral, oak	A	There is no suitable habitat in the BSA. This species typically requires rock slabs or crevices in large boulders or buildings, which are not present within the BSA. Therefore, this species is not expected to be within the

			woodland, grassland, agricultural, and urban areas. Roosts typically provide a vertical drop to allow individuals to drop into flight.		BSA.
Lasiurus blossevillii Western red bat	--	SSC	The western red bat roosts primarily in trees, sometimes shrubs, from sea level up through mixed conifer forests. This species prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	HP	There is suitable habitat in the BSA. There are large trees along the adjacent property lines east and west of the creek and a palm tree adjacent to the bridge that could provide roosting habitat for bats. Therefore, there is potential for this species to be within the BSA.
Lasiurus cinereus Hoary bat	--	S4	The hoary bat prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosting in dense foliage of medium to large trees, this species feeds primarily on moths and requires water.	HP	There is suitable habitat in the BSA. There are large trees along the adjacent propertly lines east and west of the creek and a palm tree adjacent to the bridge that could provide roosting habitat for bats Therefore, there is potential for this species to be within the BSA.
Lasiurus xanthinus Western yellow bat	--	SSC	The western yellow bat roosts in trees, particularly palm oases and riparian habitats. This species forages over water and among trees, and is not often found in urban areas.	HP	There is suitable habitat in the BSA. There is a palm tree directly adjacent to the bridge that could provide suitable roosting habitat for the western yellow bat. Therefore, there is potential for this species to be within the BSA.
Lepus californicus bennettii San Diego black-tailed jackrabbit	--	SSC	The San Diego black-trailed jackrabbit is found in intermediate canopy stages of coastal sage scrub habitats in Southern California. This species occurs in open shrub, herbaceous and tree, and herbaceous edges.	A	There is no suitable habitat in the BSA. This species typically requires coastal sage scrub habitat, which is not present in the BSA. Therefore, this species is not expected to be

					within the BSA.
Myotis ciliolabrum Western small-footed myotis	--	S4	The western small-footed myotis is found in a wide range of habitats, but is most commonly found in arid woodlands and brushy upland areas near water. This species prefers open stands in forests and woodlands and seeks cover in caves, buildings, mines, crevices, and occasionally under bridges.	A	There is no suitable habitat in the BSA. This species typically requires caves, buildings, mines, and crevices, which are not present within the BSA. Therefore, this species is not expected to be within the BSA.
Myotis yumanensis Yuma myotis	--	S4	The Yuma myotis is found in lower and upper montane coniferous forest, riparian forest, and riparian woodland. Optimal habitats for this species are open forests and woodlands with sources of water over which to feed. Distribution of the Yuma myotis is closely tied to bodies of water. The Yuma myotis roosts in buildings, mines, caves, or crevices, including trees. The species also has been seen roosting in abandoned swallow nests and under bridges. Separate, often more open, night roosts may be used.	HP	There is suitable habitat in the BSA. There are large trees along the adjacent propertly lines east and west of the creek and a palm tree adjacent to the bridge that could provide roosting habitat for bats.Therefore, there is potential for this species to be within the BSA.
Neotoma lepida intermedia San Diego desert woodrat	--	SSC	The San Diego desert woodrat is found in Joshua tree woodlands, pinyon-juniper woodlands, mixed chaparral, sagebrush, and desert habitats in Southern California from San Diego County to San Luis Obispo County. This species prefers moderate to dense canopies and is particularly abundant in rock outcrops, rocky cliffs and slopes. The San Diego desert woodrat builds dens using sticks, leaves, and other assorted materials.	A	There is no suitable habitat in the BSA. This species typically requires dense canopies or rock outcrops, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Nyctinomops femorosaccus Pocketed free-tailed bat	--	SSC	The pocketed free-tailed bat generally roosts in crevices of cliffs, high rocky outcrops, and slopes, but may also be found roosting in buildings, caves, and man-made structures. This species	A	There is no suitable habitat in the BSA. In addition, the BSA is outside of the known range for this species, and this species is not expected to be within the

			forages in desert shrub and pine-oak forests. The current range of this species in California is from Huntington Beach south to Baja California, Mexico.		BSA.
Nyctinomops macrotis Big free-tailed bat	--	SSC	The big-free tailed bat is found in low-lying arid areas in southern California. This species requires high cliffs or rocky outcrops for roosting sites and feeds principally on large moths. This species is currently found within San Diego County.	A	There is no suitable habitat in the BSA. In addition, the BSA is outside of the known range for this species, and this species is not expected to be within the BSA.
Perognathus longimemnris brevinasus Los Angeles pocket mouse	--	SSC	The Los Angeles pocket mouse is found in lower elevation grasslands, alluvial sage scrub, and coastal sage scrub.	A	There is no suitable habitat in the BSA. This species typically requires grasslands, alluvial sage scrub, or coastal sage scrub, which are not present in the BSA. Therefore, this species is not expected to be within the BSA.
Taxidea taxus American badger	--	SSC	The American badger is most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. This species needs sufficient food, friable soils and open, uncultivated ground. Ground squirrels are a major prey item, but the American badger will also feed on other burrowing rodents, reptiles, and insects.	A	There is no suitable habitat in the BSA. There is no forest, herbaceous or shrub habitat, or ground with friable soils in the BSA. In addition, no large burrows were observed during the biological survey. Therefore, this species is not expected to be within the BSA.
Natural Communities					
California Walnut Woodland	S2.1 = very threatened (2,000 to 10,000 acres)		California Walnut Woodlands are comprised of open tree canopies locally dominated by the California black walnut (*Juglans californica*).	A	There are two California black walnut trees within the BSA; however, they are on opposite sides of the bridge from each other and is not considered a California Walnut Woodland. Therefore, this natural community is absent from the BSA.

Riversidian Alluvial Fan Sage Scrub	S1.1 = very threatened (less than 2,000 acres)	Riversidian Alluvial Fan Sage Scrub communities are found in washes and on gently sloping alluvial fans. This community is made up of predominantly drought tolerant soft-leaved shrubs, but includes a significant number of larger perennial species typically found in chaparral in its mature phases.	A	There are no washes or alluvial fans in the BSA; therefore, this natural community is absent from the BSA.
Southern California Arroyo Chub/Santa Ana Sucker Stream	SNR	The arroyo chub and Santa Ana sucker prefers streams with rocky or sandy substrate, clear, cool, water, and vegetation cover on the sides. Flow must be present within the stream, but it can vary from slight to swift. Native streams frequently have large flows due to flood events, and the sucker seems capable of coping with the increase flow and turbidity.	A	The Carbon Canyon Creek is concrete-lined and is not a Southern California Arroyo Chub/Santa Ana Sucker Stream.
Southern Coast Live Oak Riparian Forest	S4 = secure within California	The Southern Coast Live Oak Riparian Forest community consists of open to locally dense evergreen sclerophyllous riparian woodlands dominated by *Quercus agrifolia*. This type of community appears to be richer in herbs and poorer in understory shrubs than other riparian communities. This community is similar to and questionably distinct from Central Coast Live Oak Riparian Forest. This community occurs in canyons and valleys of coastal southern California, mostly south of Point Conception.	A	There are no oak trees in the BSA; therefore, this natural community is absent from the BSA.
Southern Cottonwood Willow Riparian Forest	S3.2 = threatened (10,000 to 50,000 acre)	The Southern Cottonwood Willow Riparian Forest community consists of tall, open, broadleafed winter-deciduous riparian forests dominated by *Populus fremontii*, *P. trichocarpa*, and several tree willows. Similar to Central Coast Cottonwood-Sycamore Riparian Forest, although apparently with less *Quercus*	A	There are no riparian forests within the BSA; therefore, this natural community is absent from the BSA.

		agrifolia or *Alnus rhombifolia*. Understories usually are shrubby willows. This community occurs along perennially wet stream reaches of the Transverse and Penninsular ranges, from Santa Barbara County south to Baja California Norte and east to the edge of the deserts.		
Southern Interior Cypress Forest	S2.1 = very threatened (2,000 to 10,000 acres)	The Southern Interior Cypress Forest is a fairly dense, fire-maintained, low forest dominated by either *Cupressus nevadensis*, *C. forbesii*, or *C. stephensonii.* This forest often occurs as isolated groves within a matrix of chaparral or pinon-juniper woodland.	A	There are no areas dominated by *Cupressus nevadensis*, *C. forbesii*, or *C. stephensonii* within the BSA; therefore, this natural community is absent from the BSA.
Southern Riparian Scrub	S3.2 = threatened (10,000 to 50,000 acres)	Streamside thickets dominated by one or more willows and mulefat, as well as by other fast-growing shrubs and vines. This community is found along intermittent stream channels and requires flooding. Most plants recolonize following flood disturbance.	A	There are no areas dominated by willow or mulefat within the BSA; therefore, this natural community is absent from the BSA.
Southern Sycamore Alder Riparian Woodland	S4 = secure within California	The Southern Sycamore Alder Riparian Woodland community consists of tall, open, broadleafed, winter-deciduous streamside woodland dominated by *Platanus racemosa* (and often also *Alnus rhombifolia*). These stands seldom form closed canopy forests, and even may appear as trees scattered in a shrubby thicket of sclerophyllous and deciduous species.	A	There are no areas dominated by sycamore trees within the BSA; therefore, this natural community is absent from the BSA.
Southern Willow Scrub	S2.1 = very threatened (2,000 to 10,000 acres)	Southern Willow Scrub is a dense, broadleafed, winter-deciduous riparian thicket dominated by several Salix species, with scattered emergent Populus fremontii and Platanus racemosa. Most stands are too dense to allow much understory development. This community	A	There are no willow trees within the BSA; therefore, this natural community is absent from the BSA.

		is found in areas of loose, sandy, or fine gravelly alluvium soils near stream channels and requires repeated flooding.		
Walnut Forest	S1.1 = very threatened (less than 2,000 acres)	Walnut forests are cold-deciduous woodlands dominated by California walnut. The understories are composed of coastal scrub, chaparral, and non-native grass species.	A	There are two California black walnut trees within the BSA; however, they are on opposite sides of the bridge from each other and they are not considered a Walnut Forest. Therefore, this natural community is absent from the BSA.

Table Key: Absent [A] – The plant species/vegetation community or habitat requirements were not observed in the BSA during the biological survey. Habitat Present [HP] – There is habitat present within the BSA.Status: Federal Endangered (FE); Federal Threatened (FT); State Endangered (SE); State Threatened (ST); Fully Protected (FP); Federally Delisted (FD); Watch List (WL); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc. 1A = Plants presumed extirpated in California and either rare, or extinct elsewhere;1B= Plant species that are rare, threatened, or endangered in California and elsewhere; 2B= Plant species that are rare, threatened, or endangered in California, but are more common elsewhere; 3= Plants about which we need more information; 4 = Plants of limited distribution;0.1=seriously threatened in California; 0.2 = moderately threatened in California; 0.3 = Not very threatened in California; S1 = critically imperiled, less than 1,000 individuals; S2 = imperiled, 1,000 to 3,000 individuals; S3 = vulnerable, 3,000 to 10,000 individuals; S4 = apparently secure within California, there is narrow habitat.

**Information for the habitat requirements was obtained from CNPS Rare and Endangered Plant Inventory, developed and maintained by the CNPS Rare Plant Program; the California Natural Diversity Database species habitat descriptions, updated and maintained by the CDFW; California Herps online database; Cornell Lab of Ornithology All About Birds; Audubon Guide to North American Birds; and Preliminary Descriptions of the Terrestrial Natural Communities of California by Robert F. Holland (1986) were consulted during preparation of the species table and are listed in the references.*