TUSCAN HILLS
APN 638-270-002,-003,-004,-005,-006, 638-330-001, -002,-003, 638-340-003,-005,-006,-007
FOCUSED SENSITIVE BOTANICAL SURVEY

Riverside County, CA

USGS 7.5-minute topographic quadrangle map Seven Palms Valley in Sections 20, 21, 28 and 29 of Township 2 South, and Range 5 East

Prepared By:

GONZALES
ENVIRONMENTAL CONSULTING, LLC

51-842 Avenida Diaz
La Quinta, CA 92253
(760) 777-1621

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I. TITLE PAGE

A. **Date report prepared**: October 22, 2015

B. **Report Title:** TUSCAN HILLS APN 638-270-002,-003,-004,-005,-006, 638-330-001, -002,-003, 638-340-003,-005,-006,-007 FOCUSED SENSITIVE BOTANICAL SURVEY

C. **Project site location:** USGS 7.5-minute topographic quadrangle map Seven Palms Valley in Sections 20, 21, 28 and 29 of Township 2 South, and Range 5 East

D. **Location(s):** Desert Hot Springs

E. **Principal Investigator(s):**
Teresa Gonzales and Paul Gonzales
Address: 51842 Avenida Diaz
La Quinta, CA 92253
Phone: 760.777-1621

G. **Name and phone number of person preparing report and of all persons who performed fieldwork on the site**

Name of Person	Phone Number	Role on project
Teresa Gonzales	760.777-1621	Prepared report and performed fieldwork
Paul Gonzales	760.777-1621	Performed fieldwork
Dustin Bellinger	951.990-0054	Performed fieldwork

II. EXECUTIVE SUMMARY

Findings and Conclusions

In April, May, June, August and September 2015, Gonzales Environmental Consulting, LLC (GEC) conducted focused botanical surveys. Botanical surveys focused on primary objectives that would comply with CEQA requirements: (1) floristic surveys and vegetation mapping.

The site consists of four vegetation communities /land use types (Sonoran Creosote succulent scrub, Sonoran Creosote bush scrub, disturbed and streambed (desert dry wash), with the majority of the site consisting of Sonoran Creosote Bush Scrub. No special-status plant species were detected on site. The project site is not collocated with any USFWS designated critical habitat for plants.

III. PROJECT AND PROPERTY DESCRIPTION

This botanical technical report addresses botanical resources associated with the project, located in Desert Hot Springs, Riverside County, California, and characterizes the baseline condition of the project with respect to botanical resources.

Specifically, the report identifies and evaluates on site botanical resources, state and federal permitting requirements, and requirements of the California Environmental Quality Act (CEQA).

The scope of this botanical technical report includes a description of all methods employed, existing site conditions, surveys results, documentation of special-status botanical resources identified, impact analyses and mitigation measures, and recommendations for ongoing and future surveys of the site in order to identify potential impacts under CEQA. Methods of study include a review of relevant literature, general and focused field surveys, and a Geographical Information System (GIS)-based mapping and impact analyses of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), and the California Native Plant Society (CNPS).

3.1 Project and Property Description

The site is located north of Pierson Boulevard and east of what would be Foxdale Drive in Desert Hot Springs in Riverside County. The further specified as San Bernardino Meridian in Section 29 in Township 2 South, Range 5 East of Riverside County, California (Figures 1 and 2). This location is shown on the Seven Palms Valley, California 7.5-minute U.S. Geological Survey (USGS) quadrangle (Seven Palms Valley 1978); page 697 Blocks 2A, 2B, 2C, 3A, 3B and 3C of the Riverside County Street Guide (The Thomas Guide 2010). The approximate center of the site is located at UTM 11S 547891.47 meters East/ 3758676.16 meters North.


LITTLE SAN BERNARDI
Joshua Tree
Yucca Valley
Yucca Valley Airport
INDIAN COVE
MORONGO VALLEY
Morongo Valley
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
LOWER COVINGTON FLAT
UPPER COVINGTON FLAT
1772 m
LOST HORSE VALLEY
JOSHUA TREE NATIONAL PARK
Desert Hot Springs
Pierson Blvd
Project Site
62
SEVEN PALMS VALLEY
FUN VALLEY
Dillon Rd
Palm Dr
Varner Rd
PUSHAWALLA CAN
Palm Springs
Palm Springs Intl Airport
Ramon Rd
Thousand Palms
10
AGUA CALIENTE
E Palm Canyon Dr
Cathedral City
Bob Hope Dr
Monterey Ave
111
Rancho Mirage
Palm Desert
Bermuda Dunes Airport
Washington St
Indio
TWENTYNINE PALMS
CABAZON
Monroe St
Jackson St
Coachella
86
La Quinta
AUGUSTINE
Airport Blvd
SAN JACINTO
PALM CANYON
Source: Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.
Regional Map
TUSCAN HILLS
Gonzales Environmental Consulting, LLC
0
4
Miles

FIGURE 3-1

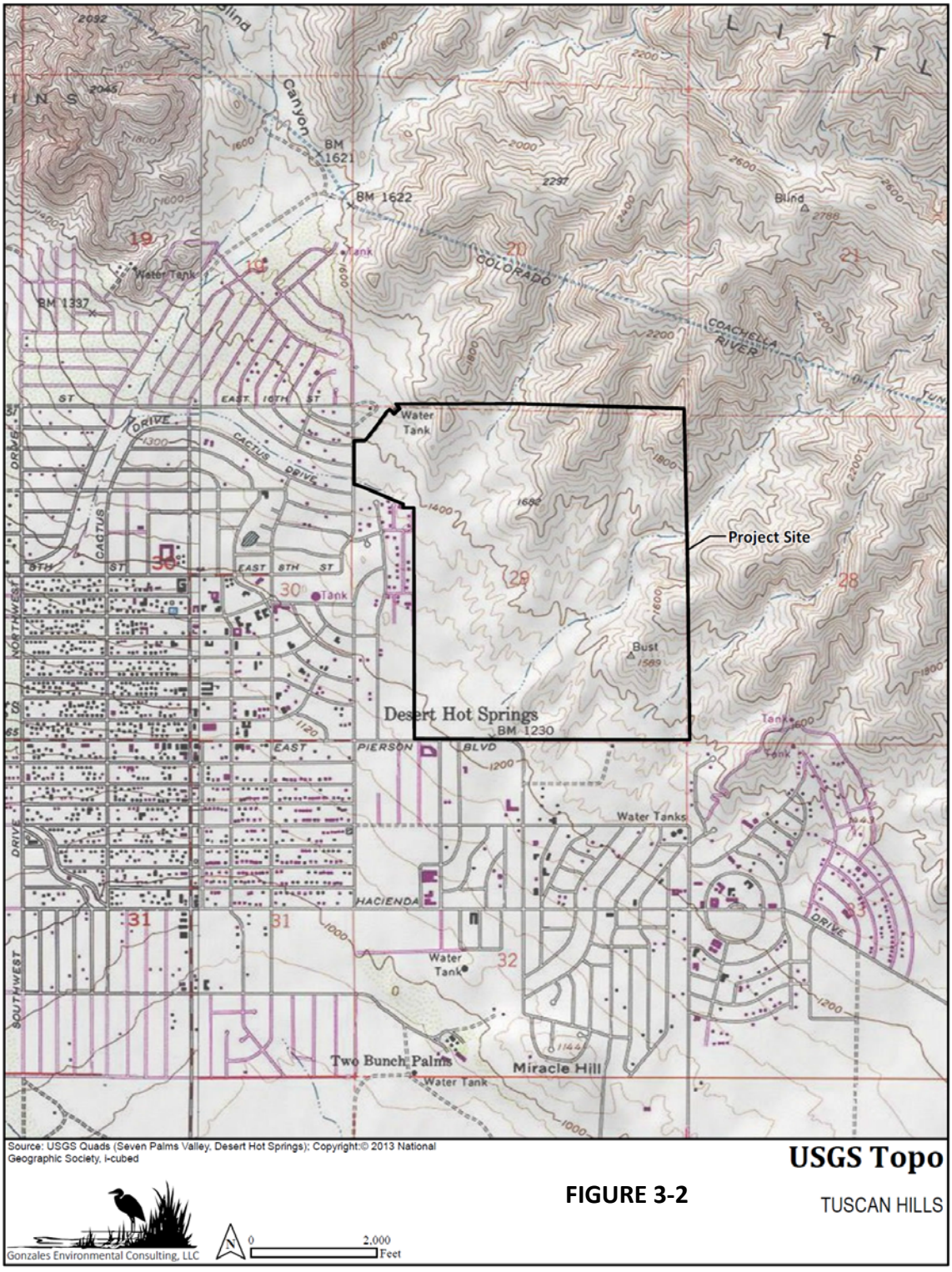
Project Site
Desert Hot Springs
BM 1230
BM 1621
BM 1622
BM 1337
Water Tank
Tank
Water Tanks
Two Bunch Palms
Miracle Hill
Bust
Blind
COLORADO
COACHELLA RIVER
PIERSON BLVD
HACIENDA
EAST 8TH ST
EAST 16TH ST
CACTUS DRIVE
Source: USGS Quads (Seven Palms Valley, Desert Hot Springs); Copyright:© 2013 National Geographic Society, i-cubed
Gonzales Environmental Consulting, LLC
0
2,000
Feet
USGS Topo
TUSCAN HILLS

FIGURE 3-2

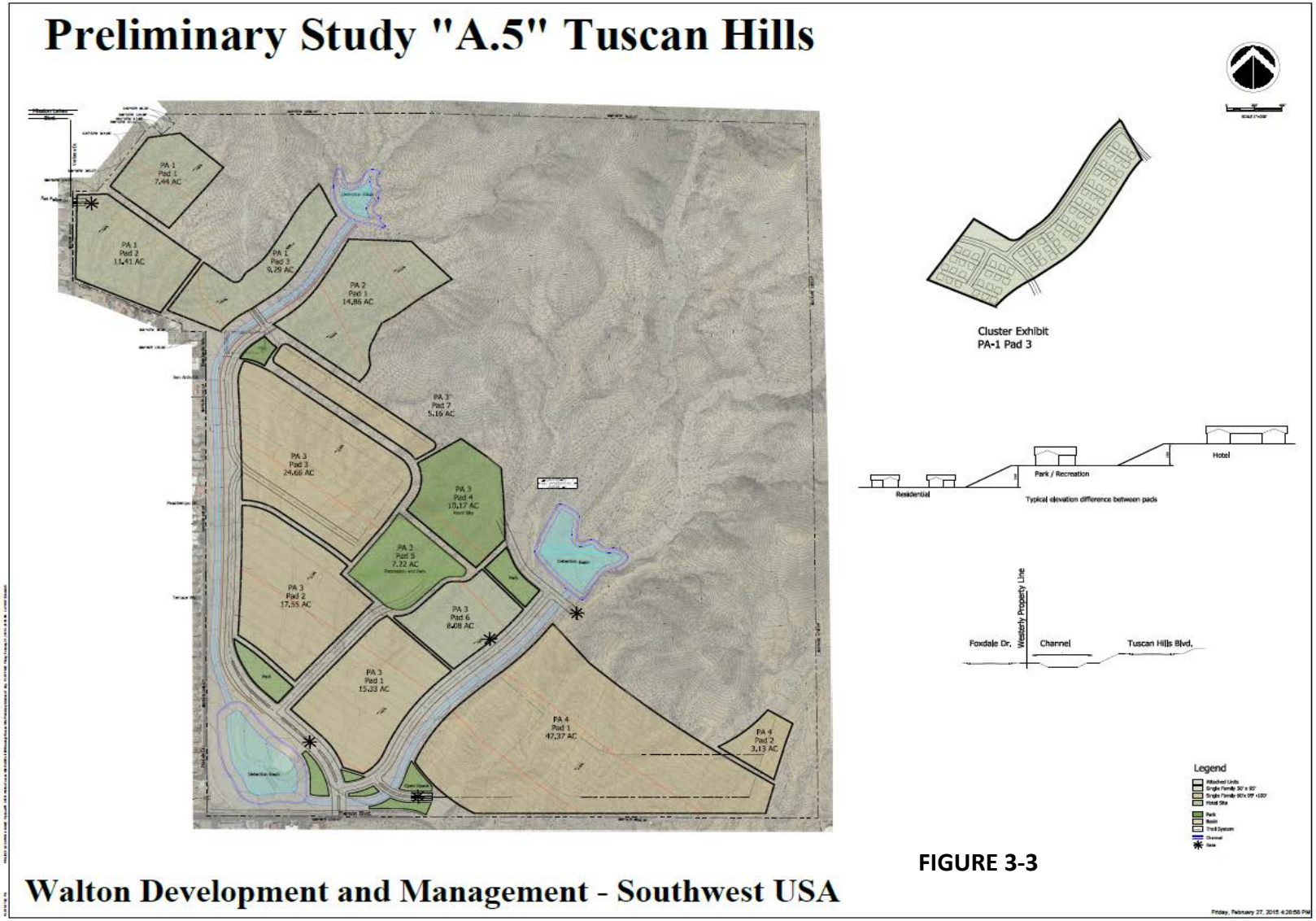
Preliminary Study "A.5" Tuscan Hills
PA 1 Pad 1 7.44 AC
PA 1 Pad 2 11.41 AC
PA 1 Pad 3 9.29 AC
PA 2 Pad 1 14.86 AC
PA 3 Pad 7 5.16 AC
PA 3 Pad 3 24.66 AC
PA 3 Pad 4 10.17 AC
PA 3 Pad 5 7.22 AC
PA 3 Pad 2 17.55 AC
PA 3 Pad 6 8.08 AC
PA 3 Pad 1 15.33 AC
PA 4 Pad 1 47.37 AC
PA 4 Pad 2 3.13 AC
Cluster Exhibit
PA-1 Pad 3
Residential
Park / Recreation
Hotel
Typical elevation difference between pads
Foxdale Dr.
Westerly Property Line
Channel
Tuscan Hills Blvd.
Legend
Walton Development and Management - Southwest USA

FIGURE 3-3

IV. METHODOLOGY

In order to identify and evaluate biological resources and potential impacts associated with development of the site relative to the California Environmental Quality Act (CEQA), GEC assembled biological data consisting of the following main components:

- Performance of vegetation mapping for the site; and
- Performance of site-specific botanical surveys to evaluate the presence of state and/or federally-listed species and other special-status species (or potentially suitable habitat) to the satisfaction of CEQA.

A review of the California Natural Diversity Database (CNDDB) [CDFW 2015], the 2015 California Native Plant Society (CNPS) Inventory (CNPS 2015), U.S. Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File Data (USFWS 2015a), and USFWS Carlsbad Field Office Species List for Riverside and San Bernardino County (2015b) other pertinent literature, and knowledge of the region. Site-specific general and focused surveys within the project area were conducted on foot for all areas that support potentially suitable habitat for each target plant or animal species identified below. The site was also surveyed on foot and the vegetation communities mapped directly onto a 200-scale color aerial photograph based on the Holland (1986) Classification System.

Prior to beginning field surveys, botanical specialists were consulted and available information from resource management plans and relevant documents were reviewed to determine the locations and types of resources that have the potential to exist within and adjacent to the study area; resources were evaluated within several miles of the Project. The materials reviewed included, but were not limited to, the following:

- California Native Plant Society Inventory of Rare and Endangered Plants of California (Seventh Edition, online) (CNPS 2015), and
- California Natural Diversity Data Base (CNDDB) for the USGS 7.5' quadrangle containing the project site: Seven Palms Valley (CNDDB 2015);
- California Natural Diversity Data Base (CNDDB) for the USGS 7.5' quadrangles surrounding the project site;
- The status of rare, threatened, and endangered animals and plants of California (CDFG 2011);
- Inventory of rare and endangered vascular plants of California (CNPS 2015);
- The Jepson manual (Baldwin, et al 2012);
- Bird species of special concern in California (Remsen 1978);
- County Sensitive Bird List;

- American Ornithologist's Union (AOU) checklist and various online websites (e.g., CalFlora 2015).

4.1 Summary of Surveys

To support the analysis detailed above, pedestrian-based field surveys were performed to assess general and dominant vegetation community types, community sizes, habitat types, and species present within communities. Community type descriptions were based on observed dominant vegetation composition and derived from the criteria and definitions of widely accepted vegetation classification systems (Holland 1986; Sawyer et al. 2009).

Plants were identified to the lowest taxonomic level sufficient to determine whether the plant species observed were non-native, native, or special-status. Plants of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded according to Baldwin et al. (2012).

Focused botanical surveys were conducted within the project site in April, May, June, August and September 2015. Field survey methods were derived from the standardized guidelines issued by the U.S. Fish and Wildlife Service (USFWS 2000), California Department of Fish and Game (CDFG 2000) and the California Native Plant Society (CNPS 2001). The field surveys were conducted to determine the presence/absence of special status[1] plant species within the project Site and were conducted during the appropriate blooming period[2] for the majority of annual plant species within the region. A census of reference populations was performed prior to initiating surveys in April to ensure that survey timing was appropriate and to assess local variations in plant phenology. The field surveys of the project site were completed by walking parallel belt transects spaced approximately 30 ft apart. Where necessary, transect spacing was reduced or expanded to account for differences in terrain, vegetation density, and visibility.

[1] For the purposes of this analysis, "special-status plant species" refers to any species that has been afforded special protection by federal, state, or local resource agencies (e.g., U.S. Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW]) or resource conservation organizations (e.g., California Native Plant Society [CNPS]) and excludes Joshua Trees.
[2] Appropriate blooming periods were derived Baldwin et al. (2012).

V. REGULATORY SETTING

The project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

5.1 State and/or Federally Listed Plants or Animals

5.1.1 State of California Endangered Species Act

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

5.1.2 Federal Endangered Species Act

FESA of 1973 defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a) (1) (B) of the FESA it is unlawful to “take” any listed species. “Take” is defined in Section 3(18) of FESA: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the USFWS, through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification that result in injury to, or death of species as forms of “take.” These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a) (2) (b) of the FESA addresses the protections afforded to listed plants.

5.1.3 State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a) (2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan .
- Sections 2090-2097 of the California Endangered Species Act (CESA) require that the state lead agency consult with CDFG on projects with potential impacts on state-listed species. These provisions also require CDFG to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFG to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

5.2 Wetland and Streambed Jurisdiction

5.2.1 Army Corps of Engineers

The USACE typically regulates any drainage channel having at least intermittent flow as "waters of the U.S.". The USACE jurisdiction over non-tidal waters of the U.S. extends laterally to the ordinary high water mark (OHWM), but may extend beyond the OHWM to include any adjacent wetlands.

Federal jurisdictional areas were determined utilizing the 1987 Corps of Engineers Wetlands Delineation Manual and the 2008 Arid West Supplement. Federal wetland determinations are based on three parameters: vegetation, soils and hydrologic characteristics of the area. The Rule creates three classifications of waters: (1) waters that are jurisdictional in all instances by rule (categorical WOTUS); (2) waters that are subject to case-specific analysis to determine jurisdiction; and, (3) waters that are excluded from jurisdiction by rule.
Six categories of waters are designated as jurisdictional by rule:
Traditional navigable waters ("All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide")
All interstate waters, including interstate wetlands
The territorial seas
All impoundments of waters otherwise identified as WOTUS
All tributaries, as defined in the final rule
All waters adjacent to one of the above water features, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters
The Rule acknowledges that the great majority of tributaries as defined by the Rule are headwater streams. Ditches also will be jurisdictional if they meet the definition of "tributary" and are not excluded.
"Adjacent" waters includes those "bordering, contiguous, or neighboring" categories 1 through 4 above, even if separated from those waters by "constructed dikes or barriers, natural river berms, beach dunes and the like."
"Neighboring" waters include those located in whole or part within the 100-year floodplain and that are within 1500 feet of the ordinary high water mark of traditional navigable water, interstate water, territorial sea, impoundment, or a tributary.
The preamble of the Rule states that "adjacent waters" do not include waters subject to established normal farming, silviculture, and ranching activities as those terms are used in Section 404(f) of the Clean Water Act.
"Other waters" determined on a case-specific basis to have a "significant nexus" to traditional navigable water, interstate water, or territorial sea also will be jurisdictional. The Rule identifies five specific types of other waters for which there is no need for a case-specific finding and, therefore, they should be analyzed "in combination" (as a group, rather than individually) when determining if they are jurisdictional:
Prairie potholes
Carolina bays and Delmarva bays
Pocosins
Western vernal pools
Texas coastal prairie wetlands
The Clean Water Rule also indicates that waters within the 100-year floodplain of traditional navigable water, interstate water, or the territorial seas, or within 4,000 feet of an ordinary high

water mark may have a significant effect on downstream waters. These waters should be evaluated individually or in combination to determine if they are jurisdictional.

Several waters and features are excluded from jurisdiction in the Clean Water Rule, even if they otherwise qualify for jurisdiction under the tributary, adjacent, or other waters categories discussed above. Examples include prior converted cropland, waste treatment systems, and log ponds. The Rule states that it retains existing exclusions from the definition of WOTUS, and that "several exclusions reflecting longstanding agency practice are added to the regulation for the first time."

Definitions:
(4) Wetlands. The term wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that, under normal circumstances, do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.
(1) Adjacent. The term adjacent means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (a)(1) through (5) of this section. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (a)(1) through (5) or are located at the head of a water identified in paragraphs (a)(1) through (5) of this section and are bordering, contiguous, or neighboring such waters. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent. (The rule includes wetlands and other waters that meet the definition of adjacent, including "neighboring," which is defined separately. Only waters, not land, are adjacent. Within the definition of "adjacent," the terms bordering and contiguous are well understood, and the agencies will continue to interpret and implement those terms consistent with current policy and practice.)
(7) High tide line. The term high tide line means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.
(6) Ordinary high water mark. The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area. ("Ordinary high water mark" sets the boundary of adjacent non-wetland waters (e.g., open waters such as lakes and ponds). Physical indicators of ordinary high water mark can be created by perennial, intermittent, and ephemeral flows.)
(2) Neighboring. The term neighboring means: (i) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section.

The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark; (ii) All waters located within the 100- year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain; (iii) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes. ("Neighboring" is the key determinant of whether a water is "adjacent," and thus jurisdictional by rule. Where the 100-year floodplain is greater than 1,500 feet, all wetlands within 1,500 feet of the tributary's ordinary high water mark are jurisdictional because they are "neighboring" to the tributary, regardless of the wetland's position relative to each other. Waters within the 100-year floodplain that are located more than 1,500 feet and up to 4,000 feet from the ordinary high water mark, or high tide line, are subject to case-specific significant nexus analysis under paragraph (a)(8).)
Riparian area omitted in the final rule because the agencies determined that the use of the riparian area was unnecessarily complicated and that as a general matter, waters within the riparian area will be within the 100-year floodplain.

(3) Tributary and tributaries. The terms tributary and tributaries each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (a)(4) of this section), to a water identified in paragraphs (a)(1) through (3) of this section that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (b) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a nonjurisdictional water to a water identified in paragraphs (a)(1) through (3) of this section. (This term has not previously been defined in any regulation or preamble. Bed and banks and ordinary high water mark (OHWM) are features that generally are physical indicators of flow. OHWM generally defines the lateral limits of a water. In many tributaries, the bed is that part of the channel below the OHWM, and the banks often extend above the OHWM. Man-altered and man-made tributaries perform many of the same functions as natural tributaries and provide connectivity between streams and downstream rivers.)
(8) Significant nexus. The term significant nexus means that a water, including wetlands, either alone or in combination with other similarly situated waters in the region, significantly affects the chemical, physical, or biological integrity of a water identified in paragraphs (a)(1) through (3) of this section. The term "in the region" means the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. For an effect to be significant, it must be more than speculative or insubstantial. Waters are similarly situated when they function alike and are sufficiently close to function together in affecting downstream waters. For

purposes of determining whether or not a water has a significant nexus, the water's effect on downstream (a)(1) through (3) waters shall be assessed by evaluating the aquatic functions identified in paragraphs (A) through (I) of this paragraph. A water has a significant nexus when any single function or combination of functions performed by the water, alone or together with similarly situated waters in the region, contributes significantly to the chemical, physical, or biological integrity of the nearest water identified in paragraphs (a)(1) through (3) of this section. Functions relevant to the significant nexus evaluation are the following: (i) Sediment trapping, (ii) Nutrient recycling, (iii) Pollutant trapping, transformation, filtering, and transport, (iv) Retention and attenuation of flood waters, (v) Runoff storage, (vi) Contribution of flow, (vii) Export of organic matter, (viii) Export of food resources, and (ix) Provision of life cycle-dependent aquatic habitat (such as foraging, feeding, nesting, breeding, spawning, or use as a nursery area) for species located in a water identified in paragraphs (a)(1) through (3) of this section. (In the final rule, the agencies list specific functions relevant to significant nexus evaluation to add clarity and transparency. A water does not need to perform all functions. If a water performs a single function that has significant impact on a downstream water, that is a significant nexus. Under the final rule, only waters covered by subparagraph (a)(7) or (a)(8) require case-specific analysis.)

> *Notes: The proposed rule that was announced on March 25, 2014, was published in the Federal Register on April 21, 2014 (79 Federal Register 22188-22274). The final revised rule was announced jointly by EPA and the Army Corps on May 27, 2015, and was published in the Federal Register on June 29: Department of the Army, Corps of Engineers, and Environmental Protection Agency, "Clean Water Rule: Definition of 'Waters of the United States,' Final Rule," 80 Federal Register 37054-37127, June 29, 2015. a. 33 C.F.R. 328.3, 40 C.F.R. 122.2, 40 C.F.R. 230.3, and 40 C.F.R. 232.2 (definition of "waters of the United States"). The term "navigable waters" is defined at 40 C.F.R. 110.1 (Discharge of Oil); 40 C.F.R. 112.2 (Oil Pollution Prevention); 40 C.F.R. 116.3 (Designation of Hazardous Substance); 40 C.F.R. 117.1(i) (Determination of Reportable Quantities for Hazardous Substances); 40 C.F.R. 300.5 and Appendix E 1.5 to Part 300 (National Oil and Hazardous Substances Pollution Contingency Plan); and 40 C.F.R. 302.3 (Designation, Reportable Quantities, and Notification). b. Comments in this table are drawn from the preamble and text of the final rule. c. The term "prior converted cropland" is included in the U.S. Department of Agriculture's administrative definition of the term "wetland" (see 7 C.F.R. 12.2). d. A definition of "waste treatment system" is found in EPA regulations (35 C.F.R. 35.905): "Complete waste treatment system. A complete waste treatment system consists of all of the treatment works necessary to meet the requirements of title III of the Act, involved in (a) The transport of waste waters from individual homes or buildings to a plant or facility where treatment of the waste water is accomplished; (b) the treatment of the waste waters to remove pollutants; and (c) the ultimate disposal, including recycling or reuse, of the treated waste waters and residues which result from the treatment process. One complete waste treatment system would, normally, include one treatment plant or facility, but also includes two or more connected or integrated treatment plants or facilities." e. Probably should be "(i) through (ix) of this paragraph."*

5.2.3 California Department of Fish and Wildlife

Fish and Game Code Chapter 6, Fish and Wildlife Protection and Conservation, Section 1600 *et seq.* was enacted to provide for the conservation of fish and wildlife resources associated with stream ecosystems. The FGC further defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities, including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45, and Division 2, Chapter 1, section 71 l.2(a), respectively). Fish means wild fish, mollusks, crustaceans, invertebrates, or amphibians, including any part, spawn or ova thereof (FGC, Division 5, Chapter 1, section 45).

For the purposes of implementing sections 1601 and 1603 of the FGC, California Code of Regulations Title 14, section 720 requires submission to the Department of general plans sufficient to indicate the nature of a project for construction by or on behalf of any person, government agency, state or local, and any public utility, of any project which will divert, obstruct or change the natural flow or bed of any river, stream or lake designated by the Department, or will use material from the streambeds designated by the Department, all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which may have intermittent flows of water, are hereby designated for such purpose.

Division 2, Chapter 5, Article 6, Section 1600 *et seq.* of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events or seasonal changes in water flow. Accordingly, it has been the practice of the Department to define the stream channel as that area where water uniformly or habitually flows over a given course, and where the width of the watercourse can reasonably be defined. Thus, a channel is not defined by a specific flow event, nor by the path of surface water as this path might vary seasonally. Rather, it is the Departments practice to define the channel based on the topography or elevations of land that confine the water to a definite course when the waters of a creek rise to their highest point. To define jurisdictional boundaries otherwise would result in a morass of jurisdictional boundaries that differed from stream to stream, changed with variations in channel morphology along the same stream, or that shifted seasonally on any given stream along with seasonal changes in flow.
The Department's website has additional information regarding dryland streams in "A review of Stream Processes and Forms in Dryland Watersheds" at this location:http://www.dfg. ca.gov/habcon/1600/ 1600resources.html.

CDFG's definition of "lake" includes "natural lakes or man-made reservoirs."

Diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake which supports fish or wildlife, require authorization from CDFG by means of entering into an agreement pursuant to Section 1601 or 1603 of the Fish and Game Code.

5.2.4 California Regional Water Quality Control Board

Water Quality Certification[3] is required for discharges of dredged and fill materials. By federal law, every applicant for a federal permit or license for an activity which may result in a discharge into a water body must request state certification that the proposed activity will not violate state and federal water quality standards. Water quality standards include beneficial uses of water, water quality objectives and antidegradation policy.

Regional Water Quality Control Board (RWQCB) has jurisdiction over similar "Wetlands" and "Waters of the United States" under Section 401 of the Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act (Porter-Cologne). Permitting of activities that would result in a discharge of soils, nutrients, chemicals, or other pollutants into Waters of the United States or adjacent wetlands, which would affect the water quality of those bodies and the area watershed, are regulated by the Board. The RWQCB also regulates discharge activities affecting Waters of the State as defined in Porter-Cologne. Isolated, non-navigable waters (e.g., vernal pools), are covered under Porter-Cologne. Statewide Waste Discharge requirements for dredged or fill discharges to waters deemed by the ACOE to be outside federal jurisdiction have been in effect since May 19, 2004.

5.3 California Environmental Quality Act

5.3.1 CEQA Guidelines Section 15380

The California Environmental Quality Act (CEQA) requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants in California may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

5.3.2 Non-Listed Special-Status Plants and Animals Evaluated Under CEQA

Federally Designated Special-Status Species

Within recent years, U.S. Fish and Wildlife Service (USFWS) instituted changes in the listing status of candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which USFWS had insufficient evidence to warrant listing) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. However, some USFWS field offices

3 United States Environmental Protection Agency. 1977. Clean Water Act. 33 USC 1251 et seq.

have issued memoranda stating that former C2 species are to be considered federal Species of Concern (FSC). This term is employed in this document, but carries no official protections. All references to federally-protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS. For this report the following acronyms are used for federal special-status species:

- FE Federally listed as Endangered
- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FC Federal candidate species (former C1 species)
- FSC Federal Species of Concern (former C2 species)

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California Species of Special Concern (SSC) are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare
- SCE State candidate for listing as Endangered
- SCT State candidate for listing as Threatened
- SFP State Fully Protected
- SP State Protected
- SSC California Special Concern Species

California Native Plant Society

CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. California Native Plant Society's Seventh Edition (Online) of the California Native Plant Society's Inventory of Rare and Endangered Plants of California separates plants of interest into five categories. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed five categories of rarity that are summarized below:

List 1A – Presumed Extinct in California
List 1A-Thought to be extinct in California based on a lack of observation or detection for many years.

List 1B – Rare or Endangered in California and Elsewhere
List 1B-Species, which are generally rare throughout their range that is also judged to be vulnerable to other threats such as declining habitat.

List 2 - Rare or Endangered in California, More Common Elsewhere
List 2-Species that are rare in California but more common outside of California

List 3 – Need More Information
List 3-Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific list. In addition, many of the List 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.

List 4 – Plants of Limited Distribution
List 4-Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for List 3 species above, CNPS lacks survey data to accurately determine status in California. Many species have been placed on List 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.

Threat Code Extension

.1 Seriously endangered in California (over 80% of occurrences threatened - high degree and immediacy of threat)
.2 Fairly endangered in California (20-80% occurrences threatened)
.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)

VI. RESULTS

This section provides the results of focused surveys for special-status plants of the project site. A full list of all plants and animals observed on site is included in the plant and animal compendium (Appendix A).

6.1 Botanical Survey Results

Weather conditions during the April and May 2015 surveys included partly cloudy to clear skies, temperatures ranging from 61-84 °F, and winds ranging from 0 to 10mph.

Weather conditions during the June, August and September 2015 surveys included partly cloudy to clear skies, temperatures ranging from 61-105 °F, and winds ranging from 0 to 10mph.

6.1.1 Vegetation Mapping

Four vegetation communities/land cover types were observed within the study area: Sonoran Creosote succulent scrub, Sonoran Creosote bush scrub, disturbed and streambed (desert dry wash) (Figure 6-1). Vegetation communities/land cover types are described below.

6.1.2 Developed

Disturbed habitat refers to areas that lack vegetation entirely but do not contain an impermeable surface. The disturbed area on the project site encompasses the existing dirt/paved roads, graded and developed areas on site.

6.1.3 Sonoran Creosote Bush Scrub

Sonoran creosote bush scrub is the most widespread vegetation type in the Colorado Desert. It is dominated by creosote (*Larrea* sp.). It characterizes the vast intermountain bajadas, reaching greatest development on coarse, well-drained soil with a total salinity of less than 0.02 percent. The structure of the creosote bush scrub community is simple because of low species diversity and the broad spacing of the shrubs, usually with bare ground between and limited structural diversity (approximately 5 to 10 feet tall). The co-dominant species in the community is white bursage (*Ambrosia dumosa*), a much shorter shrub varying from 8 to 24 inches in height. Many species of ephemeral herbs may flower in late winter/early spring if winter rains are sufficient.

6.1.4 Sonoran Mixed Woody and Succulent Scrub

This is the only Sonoran desert community with substantial dominance of cacti and other succulents. It is similar to Sonoran creosote bush scrub but is more varied and usually denser with shrubs standing 5 to 10 feet tall. It includes species from Sonoran creosote bush scrub and desert dry wash woodland, with no single species clearly dominating. Most stands have desert agave (*Agave deserti*), brittlebush (*Encelia* sp.), ocotillo (*Founqueria splendens*), pygmy-cedar (*Peucophyllum schottii*), and Mohave yucca (*Yucca schidigera*) in varying proportions.

6.1.5 Desert Dry Wash

Desert Dry Wash vegetation community is a sandy or gravelly washes and arroyos of the lower Mojave and Colorado deserts, largely in frost-free areas. These washes typically have braided channels that substantially rearrange with every surface flow event. May have an open to dense, drought-deciduous, microphyllous riparian thorn scrub woodland to 30-60 feet tall, dominated by any of several fabaceous trees.

6.2 Focused Plant Surveys

No special-status plant species were detected on site.

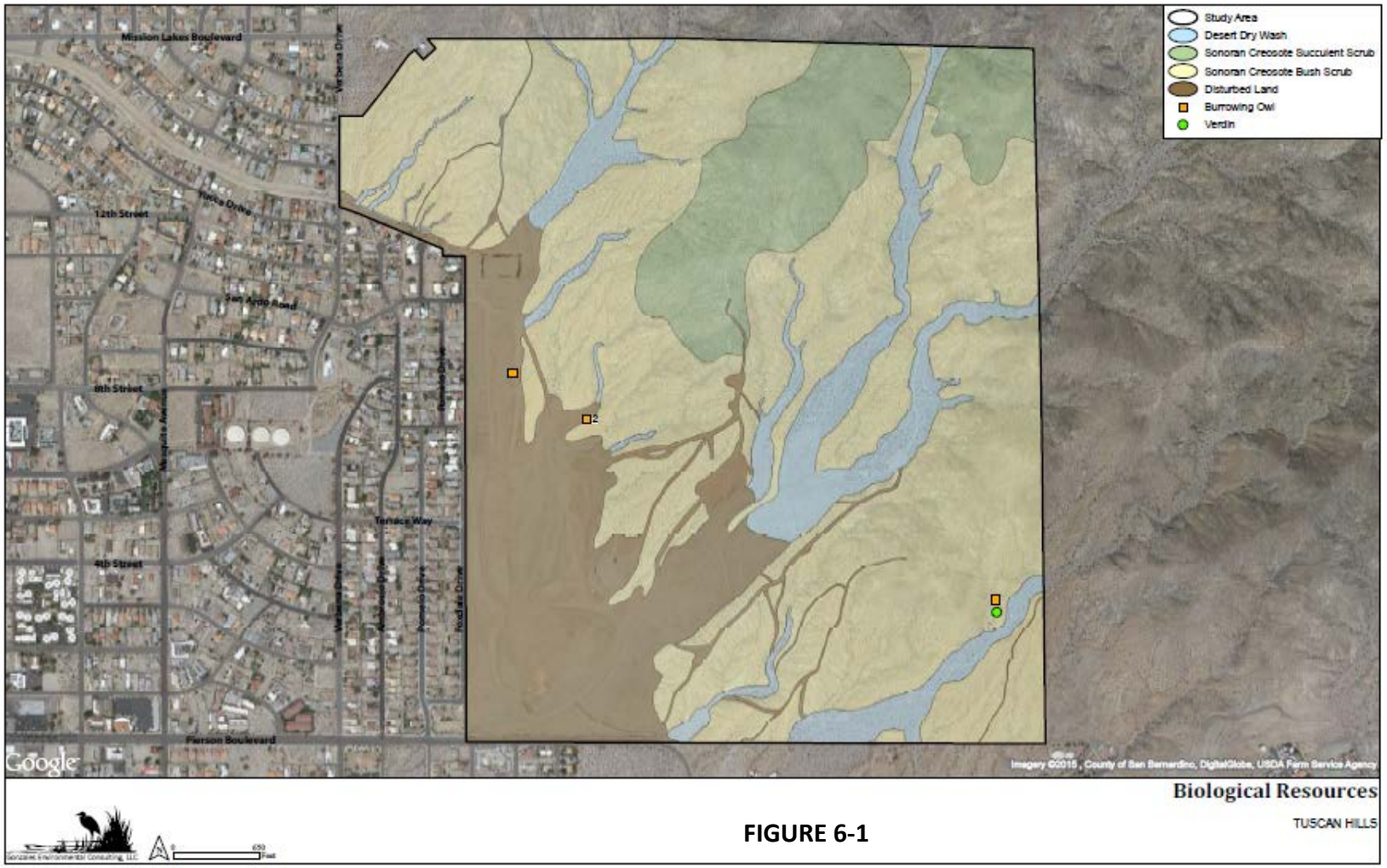
Study Area
Desert Dry Wash
Sonoran Creosote Succulent Scrub
Sonoran Creosote Bush Scrub
Disturbed Land
Burrowing Owl
Verdin
Mission Lakes Boulevard
12th Street
Rocca Drive
San Ardo Road
8th Street
Terrace Way
4th Street
Pierson Boulevard
Verbena Drive
Romero Drive
Rosedale Drive
Google
Imagery ©2015 , County of San Bernardino, DigitalGlobe, USDA Farm Service Agency
Biological Resources
TUSCAN HILLS

FIGURE 6-1

VII. IMPACTS

The following discussion examines the potential impacts to plant resources that may occur as a result of implementation of the project. Project-related impacts can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Other impacts, such as loss of foraging habitat, can occur although these areas or habitats are not directly removed by project development; i.e., indirect impacts. Indirect impacts can also involve the effects of increases in ambient levels of noise or light, and competition with exotic. Potential adverse effects, either directly or through habitat modifications, on any special-status plant, or habitat that could occur as a result of project development are discussed below.

7.1 California Environmental Quality Act

7.1.1 Thresholds of Significance

Environmental impacts relative to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."

Determining whether, a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species, et al."

The purpose of this analysis is to provide sufficient information, associated with the site, that allows for a determination whether impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) where one or more of the criteria discussed below would result from implementation of the proposed project.

7.1.2 Criteria for Determining Significance Pursuant to CEQA

Appendix G of the 2014 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

7.2 Vegetation/Land Use Impacts

Ground disturbing activities such as clearing vegetation, scraping or blading of the soil surface, deposition of foreign materials such as fill dirt, and excavation

in the areas occupied by sensitive species would directly impact the plants by removing or destroying them, resulting in the loss of the populations.

Indirect impacts due to the construction of the project may include the introduction of invasive and noxious weeds. The introduction of invasive exotic plant species may increase competition for scarce water resources and reduce the amount of water available for these populations. The spread of invasive weeds could therefore adversely affect the viability of these populations.

7.3 Indirect Effects

For many projects constructed adjacent to areas of native habitat, indirect impacts are often associated with various phases of the project, beginning at the time of initial grading and construction, and possibly continuing indefinitely. These impacts may occur as a single event, or can interact cumulatively to adversely affect native wildlife, plants, and their habitats.

Disturbance tends to drive native communities toward a higher percentage of non-native, weedy species, affecting plant and animal species distribution within a given area. Non-native plants, as an example, can escape and become naturalized, causing degradation of natural communities.

7.4 Recommended Management and Mitigation Measures

7.4.1 Avoidance and minimization of impacts

Federal and state agencies emphasize the need to avoid and minimize impacts to rare plant populations. The following actions are recommended:

- Reduce the project footprint to the minimum area needed to meet project objectives.
- Eliminate from the project footprint areas containing Foxtail cactus (*Coryphantha alversonii*), Mojave Menodora (*Menodora spinescens* var. *mohavensis*) and Hall's shrubby spurge (*Tetracoccus hallii*).
- Minimize the area disturbed during construction.
- Restrict vehicle traffic to established corridors, and do not permit off-road driving.
- Clearly mark or fence areas containing rare plant species, and avoid impacts to these areas during construction and operations.
- Control invasive weeds during construction and operations phases of the project.
- Avoid changes to the topography or alterations of the hydrology of desert washes currently supporting Foxtail cactus (*Coryphantha alversonii*), Mojave Menodora (*Menodora spinescens* var. *mohavensis*) and Hall's shrubby spurge (*Tetracoccus hallii*).

7.4.2 Mitigation measures

If avoidance and minimization measures cannot be implemented to successfully avoid all direct and indirect impacts to rare plant populations within the project

right-of-way, the following measures should be considered to mitigate the actual project impacts, as appropriate.

Mitigation measures for impacts to rare plants that have been proposed or implemented for alternative energy projects in California have included: establishment of on-site and off-site plant protection areas, protocol-level rare plant surveys of public lands, and translocation. Monitoring (Elzinga et al 1998) and adaptive management (Atkinson et al 2004) are often required components of mitigation programs.

On-site Rare Plant Protection Areas

On-site rare plant protection areas are areas within the project boundaries that have been set aside to protect important populations of rare plants and their habitats. These areas are designated as no impact zones and are fenced and signed. No construction activities or other disturbances are permitted within these areas. Indirect impacts resulting from actions outside of the protection area are avoided or minimized. The size of on-site protection areas is determined on a project-by-project basis.

Off-site Rare Plant Protection Areas

Off-site rare plant protection areas are sites located outside of the project boundaries. The sites are chosen for their protectability and the presence of suitable habitat for rare plants that may already support populations of the plant species for which mitigation is required. Habitat improvements are implemented to increase the likelihood of rare plant survival and reproduction. Typically, these sites are on private land, and must be purchased. Public land is usually not available for this type of mitigation. The size of off-site protection areas is determined on a project-by-project basis.

Translocation

Translocation refers to attempts to establish new rare plant individuals in occupied or unoccupied habitat, using seeds, or salvaged or propagated rare plant individuals (Falk et al 1996). Translocations used as mitigation in California have a low documented rate of success (Ibid.). Therefore, it is recommended as a remedial measure and, if used, translocations should be regarded as experimental efforts with low likelihood of success. Detailed evaluation of past efforts is recommended to select seed collection, propagation and out-planting procedures that are suited to the species and habitats involved in the translocation effort.

Invasive weed management

Invasive weeds have many deleterious effects on the environment, including: loss of native species and habitat diversity, reduction in food resources for wildlife, increased risk of wildfire, poisoning of wildlife and livestock, and utilization of scarce water resources (Bossard et al 2000). To reduce these effects, a comprehensive weed management strategy is recommended, including general measures to prevent the spread and introduction of noxious weeds and an Integrated Weed Management Plan with detailed procedures for controlling weed infestations, monitoring the results, and conducting remedial

actions when necessary. Alternative energy projects currently under review have been required to mitigate weed impacts through comprehensive weed control measures (CH2M HILL 2008).

General recommendations to prevent the spread and introduction of invasive weeds

The spread of invasive weed species already present within the Project area, and the introduction of new invasive weed species to the project area can be reduced by implementing the following measures:

- Educate all construction workers through a Worker Training Program about the need to minimize site disturbance and limit the spread of weeds.
- Minimize the size and extent of areas disturbed during construction, including especially the removal or disturbance of native vegetation.
- Restrict vehicles to established roads and use the minimum number of vehicles.
- Store construction vehicles on-site and use for transporting workers and equipment within the site; park commuter vehicles at the site entrance.
- Operate vehicle wash and inspection stations at all site entrances to clean soil and seeds from all vehicles entering and leaving the site.
- Use certified weed-free materials for erosion control and other restoration activities.
- Revegetate areas of temporary disturbance with local native plant species as soon as construction is complete to reduce erosion and inhibit the establishment of invasive weeds.
- Do not knowingly introduce new plant species to the site, including for landscaping.
- Control infestations of invasive weeds during construction and operation phases.
- Monitor invasive weed presence and control new infestations rapidly to prevent further spread.

7.5 Level of Impacts After Mitigation

With the mitigation measures as described above, impacts to biological resources (both direct and indirect) will be reduced to acceptable levels.

VIII. MITIGATION MEASURES

The following mitigation measures are recommended to ensure that impacts to sensitive resources and habitats as a result of the proposed project are reduced to acceptable levels.

8.1 Special-Status Plants and Animals

8.1.1 Construction Monitoring

Construction monitoring by a qualified Biologist is recommended to assist with avoidance of special status biological resources. The Biological Monitor would be responsible for ensuring that impacts on special status species, native vegetation, wildlife habitat, and unique resources are avoided to the extent feasible.

8.2 Nesting Bird Mitigation

If vegetation is to be removed during the nesting season, recognized from February 1 through August 31, a qualified biologist will conduct a nesting bird survey of potentially suitable nesting vegetation no more than three days prior to vegetation removal. If active nests are identified during nesting bird surveys, then the nesting vegetation will be avoided until the nesting event has completed and the juveniles can survive independently from the nest. The biologist will flag the nesting vegetation and will establish an adequate buffer around the nesting vegetation. Active bird nests should be mapped utilizing a hand-held global positioning system (GPS) and a 300' buffer will be flagged around the nest (500' buffer for raptor nests). Clearing/grading shall not occur within the buffer until the nesting event has completed.

8.3 Pre-construction Surveys

Pre-construction clearance surveys are recommended prior to construction to minimize impacts on special status species. Pre-construction survey for burrowing owls is recommended prior to construction. If burrowing owls are observed in the survey, then appropriate minimization measures would need to be developed in compliance with the MSHCP.

8.4 Permits/Agreements

Impacts to resources under the jurisdiction of ACOE, RWQCB, and/or CDFW should be avoided to the extent feasible. If avoidance is not feasible, permits/agreements from U.S. Army Corps of Engineers, California Department of Fish and Wildlife Streambed Alteration Agreement and California Regional Water Quality Control Board Water Quality Certification (401) will be required prior to beginning work in the wetlands.

8.5 Recommendations

1. Vehicles will remain on existing access roads and previously disturbed areas to the greatest extent possible.

2. Crews will completely cover all holes at the end of each day to prevent wildlife from becoming trapped, and upon returning to the site look in holes that have been covered to ensure that no wildlife are trapped in the holes.

3. All trash will be removed daily from the job site and all construction debris will be removed at the end of the job.

IX. REFERENCES

AOU (American Ornithologists' Union). 1998. Check-List of North American Birds. Seventh Edition (including 53rd supplement). American Ornithologists' Union, Washington, D.C. 829 pp.

Baldwin Bruce G., Douglas Goldman, David J Keil, Robert Patterson, Thomas J. Rosatti. 2012. The Jepson Manual: Vascular Plants of California. Berkeley, University of California Press. 1600 pps.

Beier, P. and S. Low. 1992. A checklist for evaluating impacts to wildlife movement corridors. Wildl. Soc. Bull. 20:434-440.

Burt, W. H. 1986. *A Field Guide to the Mammals in North America North of Mexico*. Houghton-Mifflin Company, Boston, Massachusetts.

CalFlora: Information on California plants for education, research and conservation. [web application]. 2015. Berkeley, California: The CalFlora Database [a non-profit organization]. Available from: http://www.calflora.org.

CalHerps.2014. Available from: http://www.californiaherps.com

[CDFG] California Department of Fish and Game. 2000. The status of rare, threatened, and endangered animals and plants of California. Sacramento (CA): State of California, the Resources Agency, Department of Fish and Game.

California Department of Fish and Game. 2003. The Vegetation and Classification Program. 77pps. Accessed from http://www.dfg.ca.gov.

California Department of Fish and Game. 2006. Vegetation Alliances of Western Riverside County, California. 332 pps.

[CDFW] California Department of Fish and Wildlife. 2014. Habitat Conservation Planning Branch. Assessed from http://www.dfg.ca.gov/hcpb/species/search_species.shtml

[CNDDB] California Natural Diversity Database. 2015. Accessed from http: http://www.dfg.ca.gov/biogeodata/cnddb/quick_viewer.asp

[CNPS] California Native Plant Society. 2015. Inventory of Rare and Endangered Plants (online edition, v6-04c). Rare Plant Scientific Advisory Committee. California Native Plant Society. Sacramento, CA. Accessed from http://www.cnps.org/inventory

Coachella Valley Associated Government (CVAG). 2007. Preliminary Conservation Report. http://cvag.org:6750/db_search.asp.

Cornell Lab of Ornithology. All About Birds. Bird Guide 2015. Accessed at http://www.birds.cornell.edu/AllAboutBirds

[CVMSHCP]Final Recirculated Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan. 2007. http://www.cvmshcp.org/Plan_Documents.htm

Dangermond & Associates and RECON. 2003. Multiple species habitat conservation plan: Riverside County, California.
[ERMUCR] Entomology Research Museum University of Riverside. 2014. Bug Spotlight! Assessed from http://entmuseum.ucr.edu/bug_spotlight/posted%20Images-pages/38.htm

Faber, P.M., E. Keller, A. Sands and B.M. Massey. 1989. The ecology of riparian habitats of the southern California coastal region: A community profile. U.S. Fish and Wildlife Service, Biological Report 85(7.27).

Flora of North America (FNA). 2013. www.eFloras.org. FNA Vol. 26 Page 416, 420, 421.

Garrett, K. and J. Dunn. 1981. Birds of Southern California. Los Angeles Audubon Society. Los Angeles. 408 pp.

Glaser, H. S. R. 1970. The distribution of amphibians and reptiles in Riverside, County, California. Riverside Museum Press, Natural History Series #1. Riverside, Calif.

Grinnell, J. and A.H. Miller. 1944. The Distribution of the Birds of California. Pacific Coast

Hall, E.R. 1981. *The Mammals of North America, Second Edition*, John Wiley and Sons, New York.

Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. Burrowing Owl (*Speotyto cunicularia*). In The Birds of North America, No. 130 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.

Ingles, L. G. 1999. *Mammals of the Pacific States*. Stanford University Press, Stanford, CA. 506 pp.

Jennings, M.R. and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Final Report to California Department of Fish and Game, Rancho Cordova, California. 260 pp.

Knecht, A.A. (Soil Conservation Service). 1971. Soil survey, Western Riverside area, California Washington (DC): United States Department of Agriculture, Soil Conservation Service.

Munz, P.A. 1974. *A Flora of Southern California*. University of California Press, Berkeley, California.

O'Farrell, M.J. and C.E. Uptain. 1989. Assessment of population and habitat status of the Stephens' kangaroo rat (Dipodomys stephensi). California Department of Fish and Game Nongame Bird and Mammal Section, Report 72.

Owl Pages. 2015. Accessed http://www.owlpages.com/

Petranka, J.W. 1998. Salamanders of the United States and Canada. Washington [DC]: Smithsonian Institution Press. 587 pp.

Rappole, J.H. and Blacklock, G.W. 1995. *A Field Guide to the Birds of Texas*. College Station, Texas: Texas A & M University Press.

Rarefind 5 [computer program]. 20154. Sacramento (CA): State of California, the Resources Agency, Department of Fish and Game.

Remsen J.V. 1978. Bird species of special concern in California: an annotated list of declining or vulnerable bird species. Sacramento (CA): State of California, the Resources Agency, Department of Fish and Game. 54 pp.

Resier, Craig H. 1994. Rare Plants of San Diego County. Accessed at: http://sandiego.sierraclub.org/rareplants/

[RCIP] Riverside County Integrated Project. 2003. Multiple Species Habitat Conservation Plan. Accessed at: http://rcip.org/mshcpdocs/Vol2/appendixA/3_3_3.pdf

Riverside County. 2010. Riverside County Biological impact reports guidelines.

[RCTC] Riverside County Transportation Commission. 2003. Bioregions and Generalized Vegetation on Hillshaded Relief in MSHCP Plan Area. Accessed at: http://www.rcip.org/mshcpdocs/Vol2/appendixA/A_Exhibit_02.pdf

Robertson, J. M. 1929. Some observations on the feeding habits of the burrowing owl. Condor 31: 38-39.

Small, A. 1994. California Birds: Their Status and Distribution. Ibis Publishing Company: Vista, CA. 342 pp.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/) Riverside County, California, Western Riverside Area, California (CA679) Spatial Data Version 2, Dec 9, 2013 Tabular Data Version 6, Dec 9, 2013

Stebbins, R.C. 2003. Western Amphibians and Reptiles. Boston: Houghton-Mifflin Co. 533 pp.

Still, Shannon M. Two new desert Eschscholzia (Papaveraceae) from southwestern North America, PhytoKeys. 3-11-2014; (35): 45–56

United States Department of Agriculture. 1979. Soil Survey of Riverside County, California Coachella Valley Area. 91 pgs. Illus

U.S. Department of the Army. 2015. Department of the Army, Corps of Engineers, and Environmental Protection Agency, “Clean Water Rule: Definition of ‘Waters of the United States,’ Final Rule,” 80 Federal Register 37054-37127, June 29, 2015

[USGS] A Field Guide to the Reptiles and Amphibians of Coastal Southern California. Accessed from: http://www.werc.usgs.gov/fieldguide/index.htm.

USGS. 1988. Seven Palms Valley 7.5 minute topographic quadrangle.

(WRMSHCP) Riverside County. 2006. Western Riverside Multiple Species Habitat Conservation Plan.

Zeiner D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, editors (California Department of Fish and Game). 1989. California's Wildlife. Volume I, Amphibians and Reptiles. Sacramento (CA): State of California, the Resources Agency, Department of Fish and Game. 272 pp.

Zeiner D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, editors (California Department of Fish and Game). 1990. California's Wildlife. Volume II, Birds. Sacramento (CA): State of California, the Resources Agency, Department of Fish and Game. 732 pp.

X. APPENDICES

A. Flora and Fauna Compendia
B. List of Abbreviations

XI. CERTIFICATION

CERTIFICATION*: "I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project."*

DATE: October 22, 2015 SIGNED: 

1) Teresa Gonzales

Appendix A
Plant and Animal Compendium

Non-native (3)	SCIENTIFIC NAMES	COMMON NAMES (89)
	DIVISION ANTHOPHYTA	**FLOWERING PLANTS**
	Class Dicotyledones	**Dicots**
	ASTERACEAE FAMILY	**SUNFLOWER FAMILY**
	Acamptopappus sphaerocephalus var. *sphaerocephalus*	Goldenhead
	Adenophyllum cooperi	Cooper's dogweed
	Adenophyllum porophylloides	San felipe dogweed
	Ambrosia dumosa	Burroweed
	Ambrosia salsola	Burrobrush
	Baccharis brachyphylla	Short leaved baccharis
	Baccharis sergiloides	Desert baccharis
	Bahiopsis parishii	Parish viguiera
	Baileya multiradiata	Desert marigold
	Bebbia juncea	Sweetbush
	Calycoseris parryi	Yellow tackstem
	Chaenactis carphoclinia	Pebble pincushion
	Chaenactis fremontii	Pincushion flower
	Encelia farinosa	Brittlebush
	Isocoma acradenia var. eremophila	Solitary leaved alkali goldenbush
	Malacothrix glabrata	Desert dandelion
	Monoptilon bellioides	Mojave desert star
	Oncosiphon piluliferum	Stinknet
	Pleurocoronis pluriseta	Arrow leaf
	Psilostrophe cooperi	Paper flower
	Rafinesquia neomexicana	Desert chicory
	Stephanomeria exigua	Small Wirelettuce
	Tetradymia stenolepis	Narrow scaled felt thorn
	Xylorhiza tortifolia	Mojave woodyaster
	FAMILY BORAGINACEAE	**BORAGE FAMILY**
	Cryptantha barbigera var. fergusoniae	Palm Springs cryptantha
	Cryptantha circumscissa	Cushion cryptantha
	Cryptantha nevadensis	Nevada forget me not
	Cryptantha pterocarya var. *pterocarya*	Wingnut cryptantha
	Cryptantha utahensis	Scented forget me not
	Eucrypta chrysanthemifolia var. bipinnatifida	Torrey eucrypta
	Pectocarya heterocarpa	Chuckwalla pectocarya
	Pectocarya platycarpa	Broad nutted comb bur

Non-native (3)	SCIENTIFIC NAMES	COMMON NAMES (89)
	Phacelia campanularia ssp. campanularia	Desert bells
	Phacelia crenulata	Notch leaved phacelia
	Phacelia tanaceltifolia	Tansy leafed phacelia
	FAMILY BRASSICACEAE	**MUSTARD FAMILY**
X	*Brassica tournefortii*	Sahara mustard
	Descurainia pinnata	Yellow tansy mustard
	Lepidium fremontii	Desert pepper grass
	FAMILY CACTACEAE	**CACTUS FAMILY**
	Cylindropuntia echinocarpa	Wiggins' cholla
	Echinocereus engelmannii	Calico cactus
	Ferocactus cylindraceus	Barrel cactus
	Opuntia basilaris	Beavertail pricklypear
	FAMILY CAMPANULACEAE	**BELLFLOWER FAMILY**
	Nemacladus rubescens	Desert nemacladus
	FAMILY CHENOPODIACEAE	**GOOSEFOOT FAMILY**
	Atriplex canescens	Shadscale
X	*Salsola tragus*	Russian thistle
	FAMILY CLEOMACEAE	**CLEOME FAMILY**
	Peritoma arborea	Bladderpod
	FAMILY CRASSULACEAE	**STONECROP FAMILY**
	Dudleya saxosa ssp. *aloides*	Desert dudleya
	FAMILY EPHEDRACEAE	**JOINTFIR FAMILY**
	Ephedra nevadensis	Nevada Mormon tea
	FAMILY EUPHORBIACEAE	**SPURGE FAMILY**
	Euphorbia polycarpa	Small seeded spurge
	Croton californicus	Desert croton
	Stillingia linearifolia	Narrow leaved stillingia
	FAMILY FABACEAE	**PEA FAMILY**
	Lupinus arizonicus	Arizona lupine
	Psorothamnus emoryi	Emory's indigo bush
	Psorothamnus schottii	Schott's indigo bush
	Senegalia greggii	Catclaw
	FAMILY KRAMERIACEAE	**RHATANY FAMILY**
	Krameria bicolor	White rhatany
	FAMILY LAMIACEAE	**SALVIA FAMILY**
	Condea emoryi	Desert lavender

Non-native (3)	SCIENTIFIC NAMES	COMMON NAMES (89)
	Salvia columbariae	Chia sage
	Salvia vaseyi	Vasey's sage
	Scutellaria mexicana	Paperbag bush
	FAMILY LOASACEAE	**BLAZING STAR FAMILY**
	Mentzelia involucrate	Sand blazing star
	Petalonyx thurberi	Sandpaper plant
	FAMILY MYRTACEAE	**MYRTLE FAMILY**
X	*Eucalyptus spathulata*	Swamp mallet
	FAMILY NYCTAGINACEAE	**FOUR O'CLOCK FAMILY**
	Abronia villosa var. villosa	Hairy sand verbena
	Mirabilis laevis var. *villosa*	Wishbone bush
	FAMILY ONAGRACEAE	**EVENING PRIMROSE FAMILY**
	Camissoniopsis bistorta	California sun cup
	Camissoniopsis pallida	Pale yellow sun cup
	Chylismia claviformis	Clavate fruited primrose
	FAMILY PAPAVERACEAE	**POPPY FAMILY**
	Eschscholzia minutiflora	Coville's poppy
	FAMILY PLANTAGINACEAE	**BROAD LEAVED PLANTAIN FAMILY**
	Plantago ovata var. fastigiata	Desert plantain
	FAMILY POLEMONIACEAE	**ERIASTRUM FAMILY**
	Eriastrum diffusum	Miniature woollystar
	Eriastrum sapphirinum	Sapphire woollystar
	Gilia scopulorum	Rock gilia
	Gilia stellate	Star gilia
	FAMILY POLYGONACEAE	**BUCKWHEAT FAMILY**
	Chorizanthe brevicornu var. *brevicornu*	Brittle spineflower
	Eriogonum fasciculatum	California buckwheat
	Eriogonum inflatum	Desert trumpet
	Eriogonum maculatum	Spotted buckwheat
	Eriogonum pusillum	Yellow turban
	Eriogonum reniforme	Kidney leaf buckwheat
	Eriogonum thomasii	Thomas eriogonum
	Eriogonum trichopes	Little trumpet
	FAMILY RUBIACEAE	**MADDER FAMILY**
	Galium stellatum	Starry bedstraw
	FAMILY RUTACEAE	**RUE FAMILY**

Non-native (3)	SCIENTIFIC NAMES	COMMON NAMES (89)
	Thamnosma montana	Turpentine broom
	FAMILY SIMMONDSIACEAE	**JOJOBA FAMILY**
	Simmondsia chinensis	Jojoba
	FAMILY SOLANACEAE	**NIGHTSHADE FAMILY**
	Datura wrightii	Jimsonweed
	Nicotiana obtusifolia	Desert tobacco
	Physalis crassifolia	Thick leaved ground cherry
	FAMILY ZYGOPHYLLACEAE	**CALTROP FAMILY**
	Fagonia laevis	Small flowered fagonia
	Larrea tridentata	Creosote bush
	MONOCOTS	
	FAMILY POACEAE	**GRASS FAMILY**
	Aristida adscensionis	Three awn
	Hilaria rigida	Big galleta
	Pennisetum setaceum	Fountain grass

SCIENTIFIC NAMES	COMMON NAMES
VERTEBRATES	
CLASS REPTILIA	**REPTILES(9)**
FAMILY IGUANIDAE	**IGUANA FAMILY**
Dipsosaurus dorsalis dorsalis	Northern Desert Iguana
Sauromalus ater	Common Chuckwalla
FAMILY PHRYNOSOMATIDAE	**ZEBRA-TAILED, EARLESS, FRINGE-TOED, SPINY, TREE, SIDE-BLOTCHED, AND HORNED LIZARDS FAMILY**
Callisaurus draconoides rhodostictus	Western Zebra-tailed Lizard
Sceloporus magister	Desert Spiny Lizard
Uta stansburiana elegans	Western Side-blotched Lizard
FAMILY TEIIDAE	**WHIPTAILS AND RACERUNNERS FAMILY**
Aspidoscelis tigris munda	California Whiptail

SCIENTIFIC NAMES	COMMON NAMES
FAMILY COLUBRIDAE	**COLUBRIDS FAMILY**
Chionactis occipitalis occipitalis	Mojave Shovel nosed snake
Coluber flagellum piceus	Red Racer
FAMILY VIPERIDAE	**RATTLESNAKE FAMILY**
Crotalus cerastes laterorepens	Colorado Desert Sidewinder
CLASS AVES	**BIRDS (26)**
FAMILY ODONTOPHORIDAE	**QUAIL**
Callipepla gambelii	Gambel's quail
FAMILY CATHARTIDAE	**VULTURES**
Cathartes aura	Turkey Vulture
FAMILY ACCIPITRIDAE	**BUTEOS, KITES AND HAWKS**
Accipiter cooperii	Cooper's Hawk
Buteo jamaicensis	Red-tailed Hawk
FAMILY STRIBIDAE	**OWLS**
*Athene cunicularia***	Burrowing Owl
FAMILY COLUMBIDAE	**DOVES AND PIGEONS**
*Columba livia**	Rock Pigeon
Zenaida macroura	Mourning Dove
FAMILY STRIGIDAE	**TRUE OWLS**
Bubo virginianus	Great Horned Owl
FAMILY TROCHILIDAE	**HUMMINGBIRDS**
Archilochus alexandri	Black-chinned Hummingbird
Calypte costae	Costa's Hummingbird
FAMILY CUCULIDAE	**CUCKOOS, ANIS AND ROADRUNNERS**
Geococcyx californianus	Greater Roadrunner
FAMILY FALCONIDAE	**FALCONS AND CARACARAS**
Falco sparverius	American Kestrel
FAMILY TYRANNIDAE	**TYRANT FLYCATCHERS**
Myiarchus cinerascens	Ash-throated Flycatcher
Sayornis nigricans	Black Phoebe
Sayornis saya	Say's Phoebe
FAMILY LANIIDAE	**SHRIKES**
*Lanius ludovicianus**	Loggerhead shrike
FAMILY CORVIDAE	**CROWS AND RAVENS**
Corvus corax	Common Raven
FAMILY MIMIDAE	**MIMIC THRUSHES, OR MIMIDS**
Mimus polyglottos	Northern Mockingbird

SCIENTIFIC NAMES	COMMON NAMES
FAMILY REMIZIDAE	**VERDINS**
Auriparus flaviceps	Verdin
FAMILY TROGLODYTIDAE	**WRENS**
Salpinctes obsoletus	Rock wren
FAMILY POLIOPTILIDAE	**GNATCATCHERS**
Polioptila caerulea	Blue-gray gnatcatcher
FAMILY ICTERIDAE	**BLACKBIRDS, ORIOLES AND COWBIRDS**
Icterus parisorum	Scott's oriole
FAMILY EMBERIZIDAE	**SPARROWS AND TOWHEES**
Zonotrichia leucophrys	White-crowned Sparrow
FAMILY FRINGILLIDAE	**NEW WORLD SEEDEATERS**
Haemorhous mexicanus	House Finch
Spinus lawrencei	Lawrence's Goldfinch
FAMILY PASSERIDAE	**OLD WORLD SPARROWS**
*Passer domesticus**	House Sparrow
CLASS MAMMALIA	**MAMMALS (4)**
FAMILY CANIDAE	**DOGS, FOXES AND ALLIES**
Canis latrans	Coyote
FAMILY LEPORIDAE	**RABBITS AND HARES**
Sylvilagus audubonii	Cottontail
FAMILY SCIURIDAE	**SQUIRREL FAMILY**
Spermophilus beecheyi	California Ground Squirrel
FAMILY CRICETIDAE	**WOODRATS**
Neotoma lepida	Desert Woodrat
CLASS INSECTA	**INSECTS (11)**
FAMILY CERCOPOIDEA	**SPITTLE BUGS**
Prosapia bicincta	Two-Lined Spittle Bug
FAMILY APIDAE	**HONEY BEES**
Apis mellifera	Honey Bee
FAMILY POLYOMMATINAE	**BLUE GOSSAMER-WINGED BUTTERFLIES**
Brephidium exilis	Pygmy Blue Butterfly
FAMILY APHIDIDAE	**APHIDS**
Toxoptera aurantii	Aphids
FAMILY CULICIDAE	**MOSQUITOES**
Culex quinquefasciatus	Mosquito
FAMILY FORFICULIDAE	**EARWIGS**
Forficula auricularia	European Earwigs

SCIENTIFIC NAMES	COMMON NAMES
FAMILY BOMBYLIIDAE	**ROBBER FLIES**
Mallophora fautrix	Robber fly
FAMILY MUSCIDAE	**HOUSE FLY**
Musca domestica	Common House Fly
FAMILY POMPILIDAE	**SPIDER WASPS**
Pepsis chrysothymus	Tarantula Hawk
FAMILY NYMPHALIDAE	**PAINTED LADY'S**
Vanessa cardui	Painted Lady
CLASS ARACHNIDA	**SPIDERS, MITES, TICKS AND SCORPIONS (1)**
FAMILY CTENIZIDAE	**TRAP DOOR SPIDER**
Bothriocyrtum californicum	California Trapdoor Spider

*Non-native
**Special Status

Appendix B
List of Abbreviated Terms

°F degrees Fahrenheit
ACEC Areas of Critical Environmental Concern
ACOE United States Army Corps of Engineers
CDFG California Department of Fish and Game, prior to soft name change
CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act
CESA California Endangered Species Act
CFR Code of Federal Regulations
cm centimeter
CNDDB California Natural Diversity Data Base
CNPS California Native Plant Society
DWMA Desert Wildlife Management Area
FESA Federal Endangered Species Act
ft foot/feet
GIS Geographic Information System
GPS Global Positioning System
HCP Habitat Conservation Plan
JTNP Joshua Tree National Park
km kilometer
m meter
m2 square meter
NEPA National Environmental Policy Act
NPPA Native Plant Protection Act
ROW right-of-way
USEPA United States Environmental Protection Agency
USFWS United States Fish and Wildlife Service
USGS United States Geological Survey
WRCC Western Regional Climate Center