Biological Resources Assessment & Focused Desert Tortoise Survey

for
TTM16681, Victorville CA

Jacobs

60-Acre 219-Lot Development Project on APN# APN 3103-551-05

Biological Resources Assessment and Focused Desert Tortoise Survey

September 2022

Tom Dodson & Associates

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Contents

Executive Summary **1**

1. Introduction **2**

1.1 Location 2

1.2 Environmental Setting 6

2. Assessment Methodology **7**

2.1 Biological Resources Assessment 7

2.1.1 Biological Resources Assessment Field Survey 7

2.2 Jurisdictional Delineation 7

3. Results **10**

3.1 Existing Biological and Physical Conditions 10

3.1.1 Habitat 10

3.1.2 Wildlife 10

3.2 Special Status Species and Habitats 10

3.2.1 Special Status Species 10

3.2.2 Special Status Habitats 11

3.3 Jurisdictional Delineation 15

4. Conclusions and Recommendations **16**

4.1 Sensitive Biological Resources 16

4.2 Jurisdictional Waters ..... **Error! Bookmark not defined.**

5. References **18**

Appendix A. CNDDB Species and Habitats Documented Within the *Adalanto* USGS 7.5-Minute Quadrangle

Appendix B. Site Photos

Appendix C. Species List

Appendix D. Regulatory Framework

Executive Summary

Jacobs Engineering Group, Inc. was retained by Tom Dodson & Associates to conduct a Biological Resources Assessment and Focused Desert Tortoise Survey for a proposed residential development on an approximately 60-acre parcel located in the City of Victorville, San Bernardino County, California. The Subject Parcel falls within the range of the Desert Tortoise (*Gopherus agassizii*) a State and Federally listed Threatened Species.

Jacobs' biologists conducted a Biological Resources Assessment survey to address potential effects of the Project on designated Critical Habitats and/or special status species in September of 2021. Results of the Biological Resources Assessment are intended to provide sufficient baseline information to the Project Proponent and, if required, to City and/or County planning officials and federal and state regulatory agencies to determine if the Project is likely to result in any adverse effects on sensitive biological resources and to identify mitigation measures to offset those effects. Data regarding biological resources in the Project vicinity were obtained through literature review and field investigation. Available databases and documentation relevant to the Project Area were reviewed for documented occurrences of sensitive species that could potentially occur in the Project vicinity, including the U.S. Fish and Wildlife Service designated Critical Habitat online mapper and Information for Planning and Consultation System, as well as the most recent versions of the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory.

The result of the reconnaissance-level field survey and focused desert tortoise survey was that the project site occurs withing the range of the desert tortoise, a Federally and State listed Threatened species, however the Project Area is not within or adjacent any federal Designated Critical Habitat. No tortoise or historical sign of tortoise was observed during the focused desert tortoise survey. Joshua Trees (*Yucca brevifolia*) was observed within the project boundaries. The Joshua Tree is a Candidate for listing under the California Endangered Species Act. As a Candidate species it is fully protected while a decision to list this species is made.

Jacobs' biologists also assessed the Subject Parcel for the presence of state and/or federal jurisdictional waters that may potentially be impacted by the Project. The jurisdictional waters assessment was conducted in accordance with the U.S. Army Corps of Engineers *Wetlands Delineation Manual, Jurisdictional Determination Form Instructional Guidebook, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region.* The result of the jurisdictional waters assessment is that there are no wetland or non-wetland jurisdictional waters within the Subject Parcel. Therefore, the Project will not impact any jurisdictional waters and no state or federal jurisdictional waters permitting will be required under current regulation.

This report describes biological resources, and identifies state and/or federally listed species with potential to occur in the area and presents representative site photographs. The results and conclusions presented in this report are considered preliminary and valid under current regulatory context. Additionally, according to protocol and standard practices, the results of the habitat assessment surveys will remain valid for the period of one year, or until September 2023, after which time, if the site has not been disturbed in the interim, another survey may be required to determine the persisting absence of special status species and to verify environmental conditions on site. Regardless of survey results and conclusions given herein, if any state or federally listed species are found on site during Project-related work activities, all activities likely to affect the animal(s) should cease immediately and regulatory agencies should be contacted to determine appropriate management actions.

1. Introduction

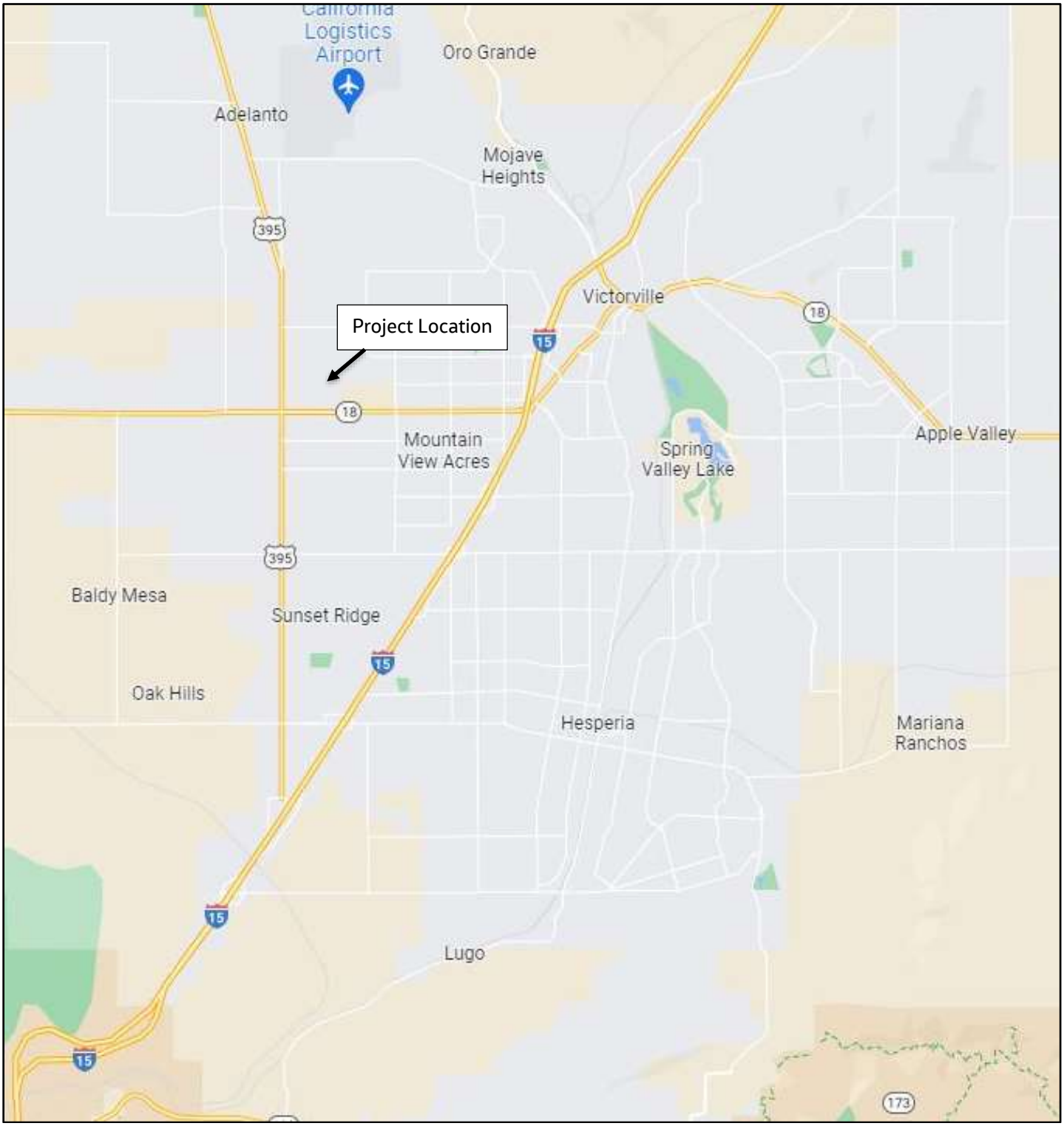
Jacobs Engineering Group, Inc. (Jacobs) has prepared this Biological Resources Assessment (BRA) report for an approximately 60-acre property (Subject Parcel) (Site) located in the City of Victorville, San Bernardino County, California. Th BRA fieldwork was conducted by Jacobs' biologist Lisa Patterson in September 2021, and Michael Kegarice conducted a focused desert tortoise and burrow owl survey in April 2022. The purpose of the BRA survey was to address potential effects of developing the Subject Parcel (Project) on designated Critical Habitats and/or any species currently listed or formally proposed for listing as endangered or threatened under the federal Endangered Species Act (ESA) and/or the California Endangered Species Act (CESA), as well as any species otherwise designated as sensitive by the California Department of Fish and Wildlife (CDFW [formerly California Department of Fish and Game]) and/or the California Native Plant Society (CNPS).

The Project Area was assessed for sensitive species known to occur locally. Attention was focused on those state and/or federally listed as threatened or endangered species and California Fully Protected species that have been documented in the vicinity of the Project Area, whose habitat requirements are present within or adjacent to the Project Area. Results of the habitat assessment are intended to provide sufficient baseline information to the Project Proponent and, if required, to City, County or other local government planning officials and federal and state regulatory agencies, including the U.S. Fish and Wildlife Service (USFWS) and CDFW, respectively, to determine if the Project is likely to result in any adverse effects on sensitive biological resources and to identify mitigation measures to offset those effects.

In addition to the BRA survey, Jacobs' biologists assessed the Project Area for the presence of state and/or federal jurisdictional waters potentially subject to regulation by the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and Porter Cologne Water Quality Control Act, and CDFW under Section 1600 of the California Fish and Game Code (FGC), respectively.

1.1 Location

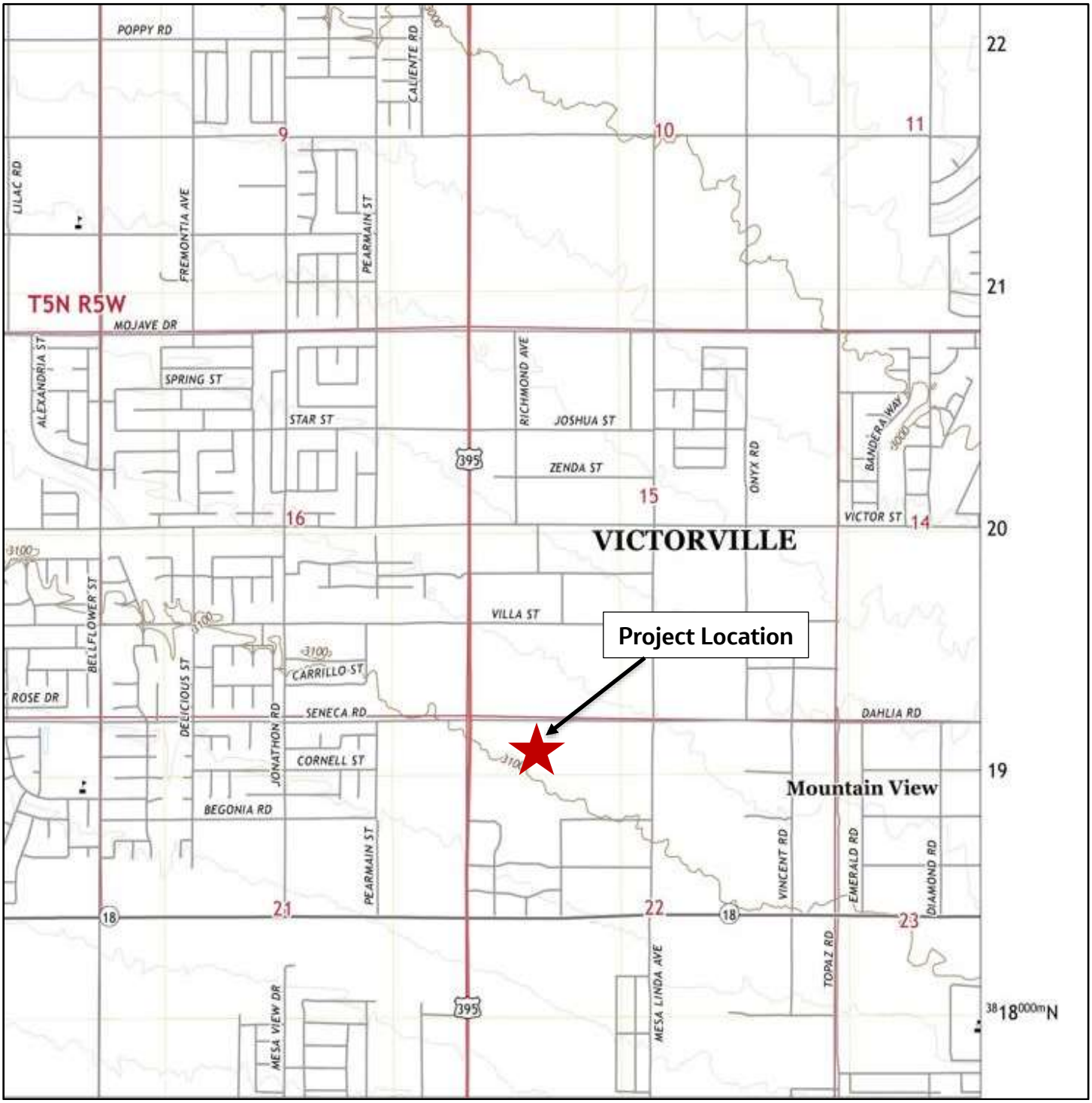
The Site is located on the south side of Seneca Road between Cantina Drive (proposed road) and Mesa Linda Ave (proposed Road), designated as APN 3103-551-05 in unincorporated San Bernardino County, California. The site is mapped on Township 5 North, Range 5 West, Section 22 as found on the USGS "Adelanto" Quadrangle, 7.5 Minute Series topographic map. The geographic coordinates are as follows: 34.51232, -117.39322. The Subject Parcel is zoned for residential development and currently consists of vacant land generally surrounded by a patchwork of vacant land, existing commercial and residential developments, highways, and a solar field. (See Figures 1& 2 for Regional Location Map and Site Location Map).



SOURCE: Google Maps

FIGURE 1

Regional Location
60- Acre Residential Development Project



SOURCE: USGS 7.5 Min Topo “Adalanto” Quad.

FIGURE 2

Topographic Map of Project Location
60-acre Residential Development Project

SOURCE: Google Earth

FIGURE 3

Jacobs

Aerial Photograph of Project Area
60- Acre Residential Development Project

1.2 Environmental Setting

The Project Area is in the western portion of the Mojave Desert, along the west side of the Mojave River. The Victorville area is subject to both seasonal and annual variations in temperature and precipitation. Average annual maximum temperatures peak at 98.1 degrees Fahrenheit (° F) in July and fall to an average annual minimum temperature of 29.2° F in January. Average annual precipitation is greatest from November through March and reaches a peak in February (1.05 inches). Precipitation is lowest in the month of June (0.04 inches). Annual total precipitation averages 5.52 inches.

The topography of the Project Area ranges from relatively flat on the eastern side to hilly on the western side. Elevation within the proposed Project Area is approximately 3,000 feet above mean sea level (amsl).

Hydrologically, the Project Area is situated within an unnamed Hydrologic Sub-Area (HSA 628.20). This HSA comprises a 556,821-acre drainage area, within the larger Mojave Watershed (HUC 18090208). The Mojave River is the major hydrogeomorphic feature within the Mojave Watershed.

Soils within the Project Area are solely comprised of Bryman loamy fine sand, 0 to 2 percent slopes. Wasco Sandy Loam, Cool, 0 To 2 Percent Slopes consists of sands comprised of alluvium derived from granite sources, and are somewhat excessively drained with a high to very high runoff class.

Land use within the Project Area and surrounding vicinity consists of residential, commercial, and open space. The Project site abuts existing commercial to the south. Habitat types within the Project Area include Larrea tridentata Shrubland Alliance (creosote bush scrub) with sparely distributed Joshua Trees. The entirety of the property is vacant lands that have been heavily impacted by ohv and encampment uses. (Figure 3).

Please refer to the attached Site Photographs at the end of this document for representative photos of the existing conditions within the Project Area at the time of survey.

2. Assessment Methodology

2.1 Biological Resources Assessment

Data regarding biological resources in the Project vicinity were obtained through literature review, desktop evaluation and field investigation. Prior to performing the field survey, available databases, and documentation relevant to the Project Area were reviewed for documented occurrences of sensitive species that could potentially occur in the Project vicinity. The USFWS IPAC report was generated to identify the presence of designated Critical Habitat, USFWS threatened and endangered species occurrence data overlay, and potential migratory bird species uses. Additionally, the most recent versions of the California Natural Diversity Database (CNDDB) and California Native Plant Society Electronic Inventory (CNPSEI) databases were searched for sensitive species data in the *Adelanto* USGS 7.5-Minute Series Quadrangle. These databases contain records of reported occurrences of state and federally listed species or otherwise sensitive species and habitats that may occur within the vicinity of the Project site (approximately 3 miles). Other available technical information on the biological resources of the area was also reviewed including previous surveys and recent findings.

2.1.1 Biological Resources Assessment Field Survey

Jacobs' biologist Lisa Patterson conducted a biological resources assessment of the Project Area in September of 2021. The reconnaissance-level field survey identified the need for a focused desert tortoise survey and a burrowing owl (*Athene cunicularia*) survey, which consisted of a pedestrian survey that encompassed the entire Subject Parcel and included 100 percent visual coverage of the site and adjacent earthen flood control channel to the north. Wildlife species were detected during field surveys by sight, calls, tracks, scat, and/or other sign. In addition to species observed, expected wildlife usage of the site was determined based on known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area. The focus of the faunal species survey was to identify potential habitat for special status wildlife that may occur within the Project vicinity.

2.2 Jurisdictional Delineation

In September, 2021, Ms. Patterson also evaluated the Project APE for the presence of riverine/riparian/wetland habitat and jurisdictional waters, i.e. Waters of the U.S. (WOTUS), as regulated by the USACE and RWQCB, and/or jurisdictional streambed and associated riparian habitat as regulated by the CDFW.

Prior to the field visit, aerial photographs of the Project APE were viewed and compared with the surrounding USGS "Adelanto" 7.5-Minute Topographic Quadrangle map to identify drainage features within the survey area as indicated from topographic changes, blue-line features, or visible drainage patterns. The USFWS National Wetland Inventory and Environmental Protection Agency (EPA) Water Program "My Waters" Google Earth Pro data layer were also reviewed to determine whether any hydrologic features and wetland areas had been documented within the vicinity of the site. Similarly, the United States Department of Agriculture (USDA) – Natural Resources Conservation Service (NRCS) Web Soil Survey was reviewed for soil types found within the Project APE to identify the soil series in the area and to check these soils to determine whether they are regionally identified as hydric soils. Upstream and downstream connectivity of waterways (if present) were reviewed on Google Earth Pro aerial photographs and topographic maps to determine jurisdictional status. The lateral extent of potential USACE jurisdiction was measured at the Ordinary High Watermark (OHWM) in accordance with regulations set forth in 33CFR part 328 and the USACE guidance documents listed below:

- USACE Wetlands Research Program Technical Report Y-87-1 (on-line edition), Wetlands Delineation Manual, Environmental Laboratory, 1987 (Wetland Delineation Manual).

- USACE Minimum Standards for Acceptance of Preliminary Wetlands Delineations, November 30, 2001 (Minimum Standards).
- USACE Jurisdictional Determination Form Instructional Guidebook, May 30, 2007 (JD Form Guidebook).
- USACE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid Lands, (Version 2.0), May 2010.
- USACE A Guide to Ordinary High-Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States, August 2014 (Delineation Manual).
- The Environmental Protection Agency (EPA) and the Department of the Army's "Navigable Waters Protection Rule: Definition of 'Waters of the United States,'" April 21, 2020 (effective June 22, 2020) (85 FR 22250).

To be considered a jurisdictional wetland under the federal CWA, Section 404, an area must possess three (3) wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology.

Hydrophytic vegetation: Hydrophytic vegetation is plant life that grows, and is typically adapted for life, in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, and herb layers) is considered hydrophytic. Hydrophytic species are those included on the 2018 National Wetland Plant Lists for the Arid West Region (USACE 2018). Each species on the lists is rated with a wetland indicator category, as shown in Table 1. To be considered hydrophytic, the species must have *wetland indicator status*, i.e., be rated as OBL, FACW or FAC.

Table 1. Wetland Indicator Vegetation Categories

Category	Probability
Obligate Wetland (OBL)	Almost always occur in wetlands (estimated probability >99%)
Facultative Wetland (FACW)	Usually occur in wetlands (estimated probability 67 to 99%)
Facultative (FAC)	Equally likely to occur in wetlands and non-wetlands (estimated probability 34 to 66%)
Facultative Upland (FACU)	Usually occur in non-wetlands (estimated probability 67 to 99%)
Obligate Upland (UPL)	Almost always occur in non-wetlands (estimated probability >99%)

Hydric Soil: Soil maps from the USDA-NRCS Web Soil Survey (USDA 2021) were reviewed for soil types found within the Project Area. Hydric soils are saturated or inundated long enough during the growing season to develop anaerobic conditions that favor growth and regeneration of hydrophytic vegetation. There are several indirect indicators that may signify the presence of hydric soils including hydrogen sulfide generation, the presence of iron and manganese concretions, certain soil colors, gleying, and the presence of mottling. Generally, hydric soils are dark in color or may be gleyed (bluish, greenish, or grayish), resulting from soil development under anoxic (without oxygen) conditions. Bright mottles within an otherwise dark soil matrix indicate periodic saturation with intervening periods of soil aeration. Hydric indicators are particularly difficult to observe in sandy soils, which are often recently deposited soils of flood plains (entisols) and usually lack sufficient fines (clay and silt) and organic material to allow use of soil color as a reliable indicator of hydric conditions. Hydric soil indicators in sandy soils include accumulations of organic matter in the surface horizon, vertical streaking of subsurface horizons by organic matter, and organic pans.

> The hydric soil criterion is satisfied at a location if soils in the area can be inferred or observed to have a high groundwater table, if there is evidence of prolonged soil saturation, or if there are any indicators suggesting a long-term reducing environment in the upper part of the soil profile. Reducing conditions

are most easily assessed using soil color. Soil colors were evaluated using the Munsell Soil Color Charts (Munsell 2000). Soil pits are dug (when necessary) to an approximate depth of 16-20 inches to evaluate soil profiles for indications of anaerobic and redoximorphic (hydric) conditions in the subsurface.

Wetland Hydrology: The wetland hydrology criterion is satisfied at a location based upon conclusions inferred from field observations that indicate an area has a high probability of being inundated or saturated (flooded, ponded, or tidally influenced) long enough during the growing season to develop anaerobic conditions in the surface soil environment, especially the root zone (USACE 1987 and USACE 2008).

Evaluation of CDFW jurisdiction followed guidance in the Fish and Game Code and *A Review of Stream Processes and Forms in Dryland Watersheds* (CDFW, 2010). Specifically, CDFW jurisdiction would occur where a stream has a definite course showing evidence of where waters rise to their highest level and to the extent of associated riparian vegetation.

3. Results

3.1 Existing Biological and Physical Conditions

The Project survey site is vacant land situated amongst a patchwork of commercial, residential developed lands, highways, and utility lines/facility. The site and general area support a mixed shrub community typical of the area and generally characterized by native shrub vegetation with some disturbance from off-highway vehicles and the dumping of trash, and transient encampments. Dominant species are creosote bush (Larrea tridentata), burrobush (Franseria dumosa), rabbit brush (Chrysothamnus depressus), rice grass (Oryzopsis hymenoides) and Russian thistle (Salsola sp.). Annuals observed during the survey included fiddleneck (Amsinckia sp.), brome (Bromus sp.), filaree Storksbill (Erodium sp.), and schismus (Schismus barbatus). Human disturbances associated with the surrounding developments**/disturbances.**

3.1.1 Wildlife

The predominant wildlife species observed or otherwise detected during the reconnaissance-level survey were birds, including house sparrow (*Passer domesticus*), Pigeon (*Columba livia*), •common raven (Corvus corax), house finch (Haemorhous mexicanus), Say's phoebe (Sayornis saya), white-crowned sparrow (Zonotrichia leucophrys), and morning dove (Zenaida macroura. Mammal species observed or otherwise detected during the reconnaissance-level survey included white-tailed antelope squirrel (Ammospermophilus leucurus), black-tailed jackrabbit (Lepus californicus) and desert cottontail (Sylvilagus audubonii). Other common species expected to occur within the Project Area include California ground squirrel (Otospermophilus beecheyi)and domestic dog (Canis lupis familiaris)

3.1.2 Special Status Species and Habitats

Per the IPaC, and CNDDB, and other relevant literature and databases, 7 sensitive species have been documented in the "Adelanto": USGS 7.5-Minute Series Quadrangles/IPaC/Other Databaes. This list of sensitive species includes any State and/or federally listed threatened or endangered species, Canditate Species, California Fully Protected species, CDFW designated Species of Special Concern (SSC), and otherwise Special Animals. "Special Animals" is a general term that refers to all the taxa the CNDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species." The CDFW considers the taxa on this list to be those of greatest conservation need. Of the 4 State and/or federally listed or Candidate species identified by the database queries as potentially occurring within the region, only four State and/or federally listed species have been documented in the Project vicinity:

- Mojave desert tortoise (Gopherus agassizii) State/Federal Threatened
- Joshua Tree (Yucca brevafolia) State Candidate
- Mohave ground squirrel (Xerospermophilus mohavensis) State Threatened
- Monarch Butterfly (Danaus plexippus) Federal Candidate
- Burrowing Owl (Athene cunicularia) SSC
- Swainson's hawk (Buteo swainsoni) State Threatened
- Le conte's thrasher (Toxistoma lecontei) SSC

Although not a State or federally listed species, the burrowing owl (Athene cunicularia) is a CDFW SSC and is considered particularly sensitive species within the region. Furthermore, this species has been documented within 1 mile of the Project site and there is potentially suitable habitat for SPOW within the Project vicinity. Therefore, this species will also be included in the discussion below.

An analysis of the likelihood for occurrence of all CNDDB sensitive species documented in the Victorville, Victorville NW, Helendale and Adelanto quads is provided in Table 1. This analysis considers species' range as well as documentation within the vicinity of the Project Area and includes the habitat requirements for each species and the potential for their occurrence on site, based on required habitat elements and range relative to the current site conditions.

3.1.3 Special Status Species

No State and/or federally listed threatened or endangered species, or other sensitive species were observed on site during the reconnaissance-level field survey. The Project site is within a highly disturbed area, between an existing wastewater treatment facility and organic waste recycling facility. Habitat within and adjacent the Project site is likely only marginally suitable for several of the special status species that have been documented in the Project vicinity.

3.1.3.1 Mojave Desert Tortoise – Threatened (Federal/State)

The Mojave desert tortoise is a State and federally listed threatened species. The species had experienced significant population declines throughout much of its range prior to becoming listed as threatened under the federal ESA in 1990. The Mojave desert tortoise has continued to decline throughout its range due to threats that include habitat loss, degradation and fragmentation, domestic grazing, predation, collections, and increased mortality rates. The Mojave desert tortoise is primarily found in creosote bush scrub and creosote bush scrub alliances, but is also occurs in other desert scrub habitats including succulent scrub, cheesebush scrub, blackbush scrub, hop-sage scrub, shadscale scrub, microphyll woodland, Joshua tree woodland and Mojave saltbush-allscale scrub plant communities. Desert tortoise primarily forage on annual forbs, but also perennials (e.g., cacti and grasses). They prefer surfaces covered with sand and fine gravel versus course gravel, pebbles, and desert pavement. Friable soil is important for digging burrows. Desert tortoise are most often found on level or sloped ground where the substrate is firm but not too rocky. Tortoise burrows are typically found at the base of shrubs, in the sides of washes and in hillsides. Because a single tortoise may have many burrows distributed throughout its home range, it is not possible to predict exact numbers of individuals on a site based upon burrow numbers.

Findings: The USFWS desert tortoise Critical Habitat overlay, the Project site is not within any USFWS designated desert tortoise Critical Habitat. The disturbed creosote bush scrub habitat within and adjacent the western half of the Project site is marginally suitable for desert tortoise. However, given the isolation, the active transient encampments with dogs, and general disturbances, the Project Area is excluded from any potentially suitable and historically occupied desert tortoise habitat that exists in the Project vicinity. Furthermore, the area appears to support an abundant raven population, which are known desert tortoise predators, likely due to the site's proximity to urban environments and the adjacent organic waste recycling facility. Therefore, the fourwing saltbush scrub/creosote bush scrub habitat within and adjacent the western half of the Project site is only marginally suitable to support Mojave desert tortoise. Based on habitat type and vegetation density, the Project Area does not support any suitable Mojave desert tortoise habitat.

The result of the protocol desert tortoise survey was that no evidence of desert tortoise presence was found in the survey area. No desert tortoise individuals or sign including desert tortoise burrows, scat, carcasses or other sign were observed. Therefore, Mojave desert tortoise are considered absent from the Project Area at the time of survey and the Project is not likely to adversely affect this species.

3.1.4 Mohave Ground Squirrel – Threatened (State)

The Mohave ground squirrel is a State listed threatened species. This small, grayish, diurnal ground squirrel is endemic to 2 million hectares in the western Mojave Desert. It typically inhabits sandy soils of alkali sink and creosote bush scrub habitat. Mohave ground squirrel forage on leaves and seeds and aestivate/hibernate for long periods of the year. Plants documented as forage for this species include: fiddleneck (Amsinckia tessellata),

allscale (Atriplex canescens and A. polycarpa), desert holly (A. hymenelytra), coreopsis (Coreopsis sp.), spiny hopsage (Grayia spinosa), winterfat (Krascheninnikovia lanata), wolfberry (Lycium andersonii), Joshua tree (Yucca brevifolia) and the seeds of Joshua tree. It is suspected that Mohave ground squirrel forage on the plant species with the highest water content available at the time.
Mohave ground squirrel populations have declined significantly throughout the species range since around 1980 and population distribution throughout its range is patchy, even within suitable habitat (CDFW 2019). Primary threats to Mohave ground squirrel populations include range contraction, habitat loss, degradation and fragmentation, climate change including increased severity and persistence of drought, and invasive species (CDFW 2019).

Findings: Although a focused Mohave ground squirrel trapping survey was not performed, Jacobs conducted a Mohave ground squirrel habitat suitability assessment of the proposed Project site and adjacent habitat. Although some Mohave ground squirrel forage plant species (Atriplex spp. and Lycium sp.) are present within the Project Area, the Project site is significantly disturbed and heavily impacted by non-native, invasive vegetation. Additionally, the vegetation density within much of the eastern half of the Project site would likely preclude Mohave ground squirrel from occupying this area. Other disturbances on site include previous clearing and transient encampments, and canines occurring on the site. Furthermore, the Project site is situated between the existing exiting residential developments and in proximity to commercial developments, and the Project Area is subject to ongoing visual, noise and dust disturbances associated with these facilities.

The Project site falls just within the historic range of the Mohave ground squirrel but is outside of any currently extant Mohave ground squirrel population areas or population linkages (CDFW 2021). The Project site is located outside of the Mohave ground squirrel Conservation Area set forth in the West Mojave Plan and is approximately 15 miles south of the nearest known MGS population area (BLM 2005; CDFW 2019).

The literature review documented the nearest Mohave ground squirrel occurrence (2011) is within approximately 5 mile northwest of the Project site (CNDDB 2021). However, extensive live-trapping and camera-trapping surveys were conducted within the southern portion of the Mohave ground squirrel range from 1998 to 2012 and very few animals were detected, despite the presence of suitable habitat, indicating that Mohave ground squirrel has been extirpated from much of the southern portion of its range (Leitner 2008 and 2015; CDFW 2019). Furthermore, the potential habitat for this species is highly fragmented within the Project vicinity and the DRECP "Habitat Intactness" and "Species Distribution" models for this species indicate that there is a very low level of habitat intactness in the Project vicinity. Given the presence of existing development surrounding the Project site, there is very little connectivity to any potentially suitable Mohave ground squirrel habitat that may still exist in the general Project vicinity. Due to the reasons discussed in these findings, Mohave ground squirrel are not likely to occur within the Project Area and the Project is not likely to adversely affect this species.

3.1.5 Burrowing owl – SSC

The burrowing owl (BUOW) is a ground dwelling owl typically found in arid prairies, fields, and open areas where vegetation is sparse and low to the ground. The BUOW is heavily dependent upon the presence of mammal burrows, with ground squirrel burrows being a common choice, in its habitat to provide shelter from predators, inclement weather and to provide a nesting place (Coulombe 1971). They are also known to make use of human-created structures, such as cement culverts and pipes, for burrows. BUOW spend a great deal of time standing on dirt mounds at the entrance to a burrow or perched on a fence post or other low to the ground perch from which they hunt for prey. They feed primarily on insects such as grasshoppers, June beetles and moths, but will also take small rodents, birds, and reptiles. They are active during the day and night but are considered a crepuscular owl; generally observed in the early morning hours or at twilight. The breeding season for BUOW is February 1 through August 31.
BUOW have disappeared from significant portions of their range in the last 15 years and, overall, nearly 60 percent of the breeding groups of owls known to have existed in California during the 1980s had disappeared by

the early 1990s (Burrowing Owl Consortium 1993). The BUOW is not listed under the State or federal ESA but is considered both a State and federal SSC. The BUOW is a migratory bird protected by the international treaty under the Migratory Bird Treaty Act of 1918 and by State law under the California FGC (FGC #3513 & #3503.5).
Findings: The definition provided in the 2012 CDFG Staff Report on Burrowing Owl Mitigation identifies, "Burrowing owl habitat generally includes, but is not limited to, short or sparse vegetation (at least at some time of year), presence of burrows, burrow surrogates or presence of fossorial mammal dens, well-drained soils, and abundant and available prey." The nearest documented BUOW occurrence (2009) within Project site (CNDDB 2021). Although no BUOW individuals or sign were observed within the Project Area during survey, the Project site (west of Shay Road) does contain some suitable habitat for this species.
Focused surveys consisting of walking transects spaced approximately 30 feet apart to provide 100 percent visual coverage of the Project site, wherever potentially suitable habitat was present, including a visual buffer area around the Project site should be conducted on this site.

3.1.6 Joshua Tree– State Candidate

The Joshua tree is a California State Candidate for listing as threatened or endangered. As a candidate species, the Joshua Tree is fully protected and cannot be trimmed, removed if fallen, removed, or relocated without a permit from the California Department of Fish and Wildlife. Additionally, a minimum of 40' buffer from the outside of the canopy need to be avoided.

The Joshua Tree grows to a height between 5 to 20 meters tall, evergreen, tree-like plant. Trees exceeding 10 meters are rare. Tree size and growth form vary with site and climate conditions, as well as between the two species. Y. brevifolia typically have one main stout stem or trunk that measures 0.3 to 1 meter in diameter and have an expanded base. Y. jaegeriana typically have multiple stems. Trunks are fibrous, and the bark or periderm is soft and cork like. Bark plates measure 7.5 to 15 cm long and 2.5 to 5 cm in thickness. Leaves are clustered in rosettes at the branch ends. Clusters are commonly 0.3 to1.5 meters long and 0.3 to 0.5 meters in diameter. Leaves are linear, needle shaped and measure 15 to 35 cm long by 0.7 to 1.5 cm wide, with enlarged bases attaching them to the branch. Leaf shape is slightly triangular and leaf margins are lined with small teeth. Spines measuring 7 to 12 mm occur at the leaf tips. Leaf clusters are longer (1-1.5 meters) on juvenile plants than on mature plants (0.3-1 meters). Outer leaf layers are thick and waxy to reduce water loss. Dead leaves are persistent and fold down, covering the branches and coating the trunks of young trees. (Gucker 2006). Joshua tree flowers occur in dense, heavy panicles that measure 20 to 40 cm long. Individual flowers are round to egg shaped and measure 2.5 to 5 cm wide. Flowers have a musky scent, with the early botanist Trelease (1893) describing the smell as "so oppressive as to render the flowers intolerable in a room." Fruits are indehiscent capsules, which become spongy and dry with age. Egg-shaped capsules are 6 to 10 cm long and approximately 5 cm in diameter. Fruits develop at the base of the inflorescence while the upper portion is still in flower. Mature fruits contain 30 to 50 black seeds, which are flat to thickened with smooth to undulate surfaces. Seeds are 7 to 11 mm long.

Joshua trees occur in desert grasslands and shrublands in hot, dry sites on flats, mesas, bajadas, and gentle slopes in the Mojave Desert (Gucker 2006). Soils in Joshua tree habitats are silts, loams, and/or sands and variously described as fine, loose, well drained, and/or gravelly, while the plants can reportedly tolerate alkaline and saline soils (Gucker 2006). Cole et al. (2011) characterizes populations as discontinuous and reaching their highest density on the well-drained sandy to gravelly alluvial fans adjacent to desert mountain ranges. Lenz (2001) reports that plants tolerate temperatures of -25°C to 51°C and annual precipitation ranges of 98 to 268 mm.

Joshua Tree have disappeared from significant portions of their range in the last 15 years, this loss of trees has been identified to be the result of development pressures, wildfires, and climate change.
Findings: One approximately 8-foot-tall western Joshua Tree was observed on the Project site. This tree and any undiscovered trees on site will need to be avoided with a minimum of 40' from the limits of the canopy. The

CDFW will need to set the buffers. As part of the candidacy process, three interim regulations under Section 2084 of the Fish and Game Code were adopted allowing for permits to be issued by the California Department of Fish and Wildlife for incidental take (removal) of western Joshua trees during its year-long candidacy period for listing under CESA. The three regulations, known as orders, are as follows

Special Order 749.11 allows for the issuance of a permit for the removal of a dead western Joshua tree or the trimming of a live western Joshua tree. Permits for these activities may be issued without payment of fees if they meet certain conditions as described in the order. The text of the regulation can be found here.

3.1.7 Monarch Butterfly – Federal Candidate

Observed in fields, roadside areas, open areas, wet area or urban gardens, milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers during breeding and migration, but they can only lay eggs on milkweed plants.
For overwintering monarchs, habitat with a specific microclimate is needed for protection from the elements, as well as moderate temperatures to avoid freezing

There is no suitable larva food plants, and no suitable over wintering habitat within the project area. Because the Monarch butterflies are migratory, there is a low probability for incidental observations during the migration.

3.2 Jurisdictional Delineation

The Project Area is within an unnamed Hydrologic Sub-Area (HSA 628.20), which comprises a 556,821-acre drainage area, within the larger Mojave Watershed (HUC 18090208). This watershed encompasses an approximately 4,600-square-mile area north of the San Bernardino and San Gabriel Mountains in the Mojave Desert, almost entirely within San Bernardino County, with the extreme western boundary overlapping into Los Angeles and Kern Counties. The Mojave Watershed is bound on the south by the Southern Mojave and Santa Ana watersheds, on the northeast by the Coyote-Cuddeback Lakes, Death Valley-Lower Amargosa, and Ivanpah-Pahrump Valleys watersheds, and on the west by the San Gabriel and Antelope-Fremont Valleys watersheds. The

Mojave River is the major hydrogeomorphic feature of the Mojave Watershed.
The Project site is not any drainage features on the site or adjacent to the site.***Waters of the U.S.***
The USACE has authority to permit the discharge of dredged or fill material in WOTUS under Section 404 of the CWA " WOTUS are defined as: "The territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters." (85 FR 22250).

There are no wetland or non-wetland WOTUS within the Subject Parcel or adjacent to the subject parcel. The Project will not result in any permanent or temporary impacts to WOTUS. Therefore, the Project would be exempt from CWA Section 404/401 permitting.

State Lake/Streambed

There are no "waters of the State" within the Subject Parcel and the Project will not result in any permanent or temporary impacts to jurisdictional waters of the State. Therefore, the Project would be exempt from FGC Section 1602 and RWQCB permitting as well.

4. Conclusions and Recommendations

4.1 Sensitive Biological Resources

Sensitive Biological Resources

This BRA survey was conducted by Jacobs in September 2021 and April 2022 to identify potential habitat for special status plants and wildlife within the Project Area, and to conduct a focused desert tortoise/burrowing owl survey. The western Joshua Tree a State candidate for listing as threatened or endangered was observed within the Project Area during survey.

The proposed Project is within an already disturbed environment surrounded by existing residential and commercial development, highways and roads, and utility corridors and facility. The disturbed desert scrub habitat within the Project site is marginally suitable for several special status species, and there historic occurrences of this species on the Project site.

General Measure:

A qualified biologist shall develop a Worker Environmental Awareness Program (WEAP) that would include information on general and special status species within the Project Area, identification of these species and their habitats, techniques being implemented during construction to avoid impacts to species, consequences of killing or injuring an individual of a listed species, and reporting procedures when encountering listed or sensitive species. All construction crews, foremen, and other Project personnel potentially working on site should attend this education program prior to the first day of work.

Western Joshua Tree

Joshua Tree was identified on the site during the general biological survey. Joshua are fully protected in the State of California, and may not be trimmed, moved, or removed regardless of condition unless permitted by the CDFW. Joshua trees should be avoided with a minimum of 40' from the limits of the canopy.

The graphic below (Figure 4) depicts several Joshua trees observed. An exhaustive search was not made due to the site being occupied by encampments. It is likely additional Joshua trees occur within the Project Area.

Western Joshua Tree Location Map

SOURCE: GPS/ Google Earth

JACOBS

FIGURE 4

Desert Tortoise

The focused survey findings were negative for the presence of this species. Further, based on habitat conditions, and existing disturbances within the Project site and surrounding area, as well as the proximity of the Project Area relative to the current known population distributions of desert tortoise, this species is not likely to occur within the Project Area and the Project is not likely to adversely affect this species. In order to insure avoidance of this species, the following mitigation measures beyond is recommended for Mojave Desert tortoise are warranted or recommended.

Preconstruction surveys for desert tortoise should be conducted no more than 14 days prior to new ground disturbance within each phase of development to verify that Mojave Desert tortoise remain absent from the Project Area.

A qualified biological monitor should be present during all ground disturbing activities (clearing, grubbing and grading) to ensure that construction related activities do not impact any sensitive wildlife that may wander onto the site during construction.

Mohave Ground Squirrel

Based on the habitat conditions and existing disturbances within the Project site and surrounding area, as well as the proximity of the Project Area relative to the current known population distributions of Mohave ground squirrel, this species is not likely to occur within the Project Area and the Project is not likely to adversely affect this species. No additional avoidance, minimization or mitigation measures beyond those to those already recommended for Mojave Desert tortoise (above) are warranted or recommended.

Burrowing Owl

A BUOW habitat suitability assessment was conducted by Jacobs' biologists in April of 2022 on the Project site, wherever potentially suitable BUOW habitat was present. Although no BUOW individuals or sign including castings, feathers or whitewash were observed and BUOW are considered absent from the Project Area at the time of survey; a focused protocol survey should be conducted. Because the Project is not likely to adversely affect this species, there is still a low potential for this species to occur in the Project Area and the following precautionary avoidance measures are recommended to ensure the Project does not result in any impacts to BUOW:

BUOW would be included as one of the species covered in the WEAP that all construction crews, foremen, and other Project personnel potentially working on site should attend prior to the first day of work.

Preconstruction surveys for BUOW should be conducted prior to new ground disturbance within each phase of development to verify that BUOW remain absent from the Project Area.

Nesting Birds

There is habitat within the Project Area that is suitable to support nesting birds, including adjacent habitat potentially suitable to support SWFL and LBVI. Most native bird species are protected from unlawful take by the MBTA (Appendix A). In December 2017, the Department of the Interior (DOI) issued a memorandum concluding that the MBTA's prohibitions on take apply "[…] only to affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs" (DOI 2017). Then in April 2018, the USFWS issued a guidance memorandum that further clarified that the take of migratory birds or their active nests (i.e., with eggs or young) that is incidental to, and not the purpose of, an otherwise lawful activity does not constitute a violation of the MBTA (USFWS 2018).

However, the State of California provides additional protection for native bird species and their nests in the FGC (Appendix A). Bird nesting protections in the FGC include the following (Sections 3503, 3503.5, 3511, 3513 and 3800):

Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.

Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys, and falcons, among others), and Strigiformes (owls).

Section 3511 prohibits the take or possession of Fully Protected birds.

Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that Project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

Section 3800 prohibits the take of any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird).

Given the presence of the ongoing disturbances associated the proposed Project are not likely to constitute a significant impact to nesting birds that may be present adjacent the Project site, including SWFL and LBVI. However, the Project could result in direct impacts to nesting birds potentially occurring within the Project site. In general, impacts to all bird species (common and special status) can be avoided by conducting work outside of the nesting season, which is generally February 1st through August 31st. However, if all work cannot be conducted outside of nesting season, the following is recommended:

To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist should conduct pre - construction Nesting Bird Surveys (NBS) prior to Project - related disturbance to suitable nesting areas to identify any active nests. If no active nests are found, no further action would be required. If an active nest is found, the biologist should set appropriate no - work buffers around the nest which would be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nest(s) and buffer zones should be field checked weekly by a qualified biological monitor. The approved no - work buffer zone should be clearly marked in the field, within which no disturbance activity should commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

5. References

Calflora: Information on California plants for education, research and conservation. [web application]. 2021. Berkeley, California: The Calflora Database [a non-profit organization]. Available at: http://www.calflora.org/; accessed 2 July 2022.

California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines.

California Department of Fish and Game. 1995. Staff report on burrowing owl mitigation. Memo from C.F. Raysbrook, Interim Director to Biologist, Environmental Services Division, Department of Fish and Game. Sacramento, CA.

California Department of Fish and Game (CDFG). 2010. A Review of Stream Processes and Forms in Dryland Watersheds. Prepared by Kris Vyverberg, Senior Engineering Geologist, Conservation Engineering. December 2010.

California Department of Fish and Game (CDFG). 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency. March 7, 2012.

California Native Plant Society, Rare Plant Program. 2021. Inventory of Rare and Endangered Plants of California [online edition, v8-03 0.45]. Available at: http://www.rareplants.cnps.org; accessed 2 July 2022.

California Natural Diversity Database (CNDDB). 2021. *RareFind 5* [Internet]. California Department of Fish and Wildlife, Version 5.2.14. Available at: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data; accessed 2 July 2022.

County of Riverside, Environmental Programs Department. Revised August 17, 2006. Burrowing Owl Survey Instructions for Western Riverside Multiple Species Habitat Conservation Plan Area, March 29, 2006.

County of San Bernardino. APNs 338-150-046 and 338-150-031 search for site-specific information and maps.

Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Miss.

Griffith, G.E., Omernik, J.M., Smith, D.W., Cook, T.D., Tallyn, E., Moseley, K., and Johnson, C.B., 2016, Ecoregions of California (poster): U.S. Geological Survey Open-File Report 2016–1021, with map, scale 1:1,100,000, http://dx.doi.org/10.3133/ofr20161021; accessed 2 July 2022.

Jepson Flora Project (eds.) 2021, Jepson eFlora, http://ucjeps.berkeley.edu/eflora/; accessed 2 July 2022.

Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.

National Wetlands Inventory (NWI). 2021. U.S. Fish and Wildlife Service Wetlands Mapper. Available online at: https://www.fws.gov/wetlands/data/mapper.html; accessed 2 July 2022.

Natural Resources Conservation Service (NRCS). 2021. Web Soil Survey. Map Unit Descriptions. Riverside County Area, California. Available at: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm; accessed 2 July 2022.

Sawyer, John O., Keeler-Wolf, Todd, and Evens, Julie M. 2009. A manual of California vegetation. Second Edition. California Native Plant Society, Sacramento, California, USA. 1,300 pages.

U.S. Army Corps of Engineers (USACE). 2001. USACE Minimum Standards for Acceptance of Preliminary Wetlands Delineations, November 30, 2001 (Minimum Standards).

U.S. Army Corps of Engineers (USACE). 2007. Jurisdictional Determination Form Instructional Guidebook (JD Form Guidebook). May 30.

U.S. Army Corps of Engineers (USACE). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Army Corps of Engineers (USACE). 2014. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (A Delineation Manual). August 2008.

Western Regional Climate Center. Period of Record Monthly Climate Summary for Riverside Fire Sta. 3, California (047470). Available at: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7470; accessed 2 July 2022.

80 FR 37053. 2015. The Environmental Protection Agency (EPA) and the Department of the Army's "Clean Water Rule: Definition of 'Waters of the United States'" June 29, 2015 (effective August 28, 2015).

85 FR 22250. 2020. The Environmental Protection Agency (EPA) and the Department of the Army's "Navigable Waters Protection Rule: Definition of 'Waters of the United States,'" April 21, 2020 (effective June 22, 2020).

CNDDB Species and Habitats Documented Within the *Victorville* USGS 7.5-Minute Quadrangle

CNDDB/IPACSpecial Status Species Occurrence Potential Analysis

CNDDB Element Occurrences for USGS 7.5 min Quadrangle "Adalanto"				
Scientific Name	**Commmon Name**	**Fed/CA List**	**Habitat**	**Probability of Occurrence**
Xerospermophilus mohavensis	Mohave ground squirrel	None/ Threatened	Open desert scrub, alkali scrub and Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert. Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows.	Only marginal fragmented habitat occurs on this site. Further, there are no records of this species in the vicinity of the project site, and the site is surrounded by development and is highly disturbed by OHV and transient encampments. Therefore, the probability of occurrence is exceedingly low, and no follow-on focused surveys are warranted.
Athene cunicularia	burrowing owl	None/None	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	There is suitable habitat for this specie withing the project site. However, the site is highly disturbed, and impacted by OHV and transient encampments. There are historic records in the CNDDB (See Figure 4). Therefore, the probability of occurrence is moderate, and Focused protocol surveys are recommended.
Buteo swainsoni	Swainson's hawk	None/ Threatened	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas	There is no suitable habitat within the project site. Therefore, the probability of occurrence is zero.

CNDDB Element Occurrences for USGS 7.5 min Quadrangle "Adalanto"				
Scientific Name	**Commmon Name**	**Fed/CA List**	**Habitat**	**Probability of Occurrence**
			such as grasslands, or alfalfa or grain fields supporting rodent populations.	
Toxostoma lecontei	Le Conte's thrasher	None/None	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	There is suitable habitat for this specie withing the project site. However, the site is highly disturbed, and impacted by OHV and transient encampments. Therefore, the probability of occurrence is moderate.
Gopherus agassizii	desert tortoise	Threatened/Threatened	Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Although there is suitable habitat for this specie withing the project site, the site is isolated by development and highly disturbed by OHV and transient encampments. Therefore, the probability of occurrence is low, and focused protocol surveys are not recommended.
Yucca brevafolia	Joshua Tree	State Candidate	Joshua trees occur in desert grasslands and shrublands in hot, dry sites on flats, mesas, bajadas, and gentle slopes in the Mojave Desert (Gucker 2006). Soils in Joshua tree habitats are silts, loams, and/or sands and variously described as fine, loose, well drained, and/or gravelly, while the plants can reportedly tolerate	Joshua Tree is present on this site

CNDDB Element Occurrences for USGS 7.5 min Quadrangle "Adalanto"				
Scientific Name	**Commmon Name**	**Fed/CA List**	**Habitat**	**Probability of Occurrence**
			alkaline and saline soils (Gucker 2006). Cole et al. (2011) characterizes populations as discontinuous and reaching their highest density on the well-drained sandy to gravelly alluvial fans adjacent to desert mountain ranges. Lenz (2001) reports that plants tolerate temperatures of -25°C to 51°C and annual precipitation ranges of 98 to 268 mm.	
Danaus plexippus	Monarch Butterfly	Federal Candidate	Observed in fields, roadside areas, open areas, wet area or urban gardens, milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers during breeding and migration, but they can only lay eggs on milkweed plants. For overwintering monarchs, habitat with a specific microclimate is needed for protection from the elements, as well as moderate temperatures to avoid freezing..	There is no suitable larva food plants, and no suitable over wintering habitat within the project area. Because the Monarch butterflies are migratory, there is a low probability for incidental observations during the migration.

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Adelanto (3411754))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Gopherus agassizii desert tortoise	ARAAF01012	Threatened	Threatened	G3	S2S3	
Toxostoma lecontei Le Conte's thrasher	ABPBK06100	None	None	G4	S3	SSC
Xerospermophilus mohavensis Mohave ground squirrel	AMAFB05150	None	Threatened	G2G3	S2S3	

Record Count: 5

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

In Reply Refer To:
Project Code: 2022-0090799
Project Name: Seneca 219 Lot Development (TTM 16681)

September 30, 2022

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, 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 at the Fish and Wildlife Service's Endangered Species Consultation website at:

https://www.fws.gov/endangered/what-we-do/faq.html

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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 Code 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

Project Code: 2022-0090799
Project Name: Seneca 219 Lot Development (TTM 16681)
Project Type: Residential Construction
Project Description: 60-Acre Single Family Residential Development in the City of Victorville, CA
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.51220155,-117.3940361211582,14z

Counties: San Bernardino County, California

Endangered Species Act Species

There is a total of 2 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Reptiles

NAME	STATUS
Desert Tortoise *Gopherus agassizii*	Threatened

Population: Wherever found, except AZ south and east of Colorado R., and Mexico
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
Species profile: https://ecos.fws.gov/ecp/species/4481

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Critical habitats

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

IPaC User Contact Information

Agency: Tom Dodson & Associates
Name: Lisa Patterson
Address: PO Box 37
City: O Neals
State: CA
Zip: 93645
Email lmpatterson1964@hotmail.com
Phone: 9098381333

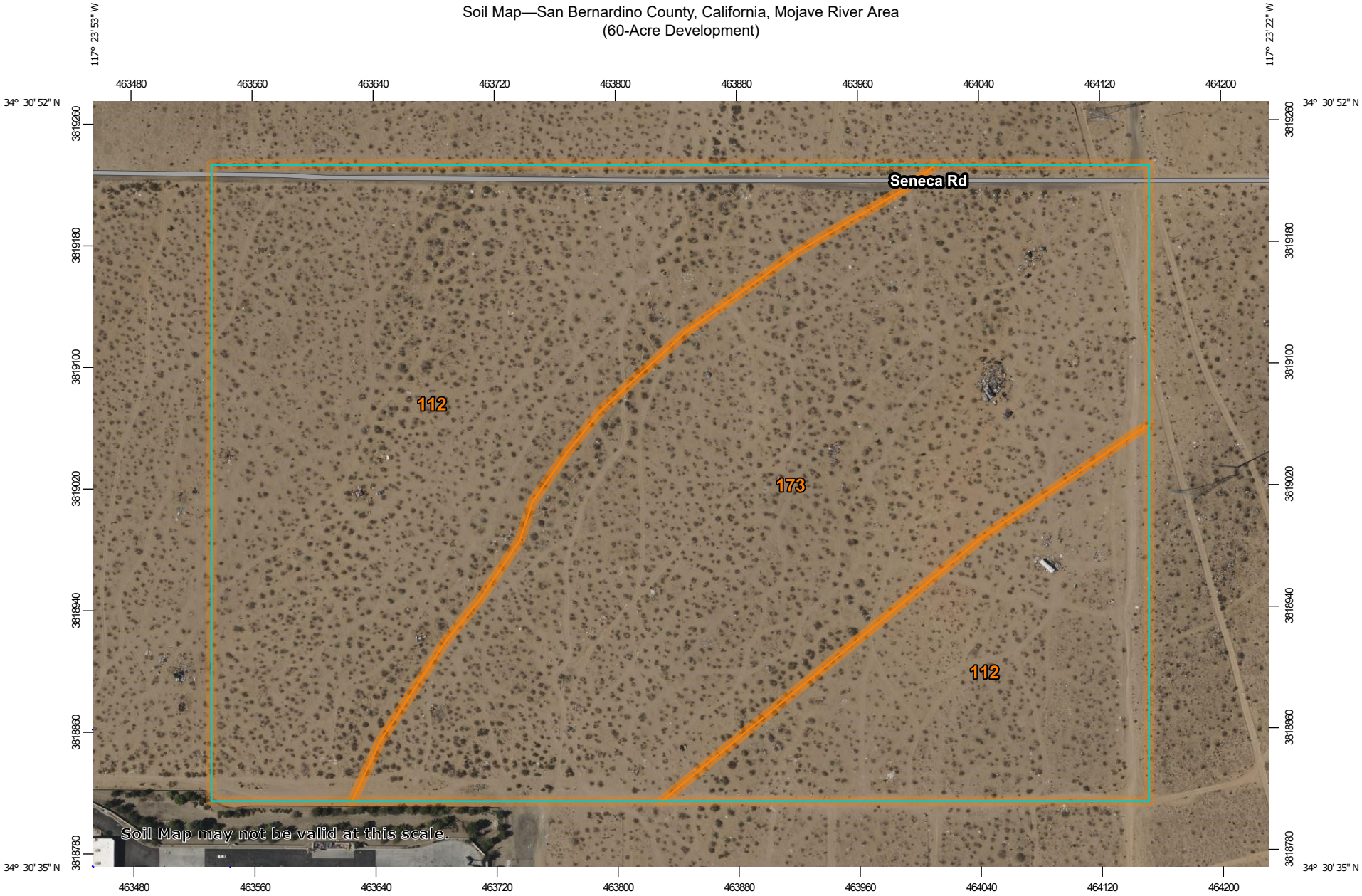
Appendix A. Site Photos:

Photograph #1 Typical Site View looking north-east

Photograph #2 Typical Site View looking south-east

Appendix B. Soil Map

Soil Map—San Bernardino County, California, Mojave River Area
(60-Acre Development)



Map Scale: 1:3,550 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County, California, Mojave River Area
Survey Area Data: Version 14, Sep 1, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 17, 2022—Jun 12, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
112	CAJON SAND, 0 TO 2 PERCENT SLOPES	35.7	55.5%
173	WASCO SANDY LOAM, COOL, 0 TO 2 PERCENT SLOPES	28.7	44.5%
Totals for Area of Interest		**64.4**	**100.0%**

Appendix C. Species List

List of Species Observed within the Subject Parcel

Table 1. List of plant species that were observed

Common Name	Scientific Name
Creosote bush	Larrea tridentata
Rabbit brush	Chrysothamnus nauseosis
Annual burweed	Franseria acanthicarpa
Red-stem filaree	Erodium cicutarium
Vinegar weed	Trichostema lanceolatum
Rattlesnake weed	Euphorbia albomarginata
Annual burweed	Franseria acanthicarpa
Mustard sp.	Brassicaceae
Sahara mustard	Brassica tournefortii
Russian thistle	Salsola iberica
Cheat grass	Bromus tectorum
Rce grass	Oryzopsis hymenoides
Schismus	Schismus barbatus

Table 2. List of wildlife species, or their sign, that were observed

Common Name	Scientific Name
California ground squirrel	Otospermophilus beecheyi
White-tailed antelope squirrel	Ammospermophilus leucurus
Desert cottontail	Sylvilagus auduboni
Black-tailed jackrabbit	Lepus californicus
domestic dog	Canis lupis familiaris
Common raven	Corvus corax
House sparrow	Passer domesticus
Pigeon	Columba livia
Say's phoebe	Sayornis saya
House finch	Haemorhous mexicanus
White-crowned sparrow	Zonotrichia leucophrys

Appendix D. Regulatory Framework

Federal Regulations

Clean Water Act

The purpose of the Clean Water Act (CWA) of 1977 is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States" (WOTUS) without a permit from the United States Army Corps of Engineers (USACE). The definition of waters of the United States includes rivers, streams, estuaries, territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water 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" (33 Code of Federal Regulations [CFR] 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; in California this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

Federal Endangered Species Act (ESA)

The federal Endangered Species Act (ESA) of 1973 protects plants and wildlife that are listed by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) as endangered or threatened. Section 9 of the ESA (USA) prohibits the taking of endangered wildlife, where taking is defined as any effort to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 United States Code [USC] 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect an endangered species (including plants) or its Critical Habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity, provided the action will not jeopardize the continued existence of the species. The ESA specifies that the USFWS designate habitat for a species at the time of its listing in which are found the physical or biological features "essential to the conservation of the species," or which may require "special Management consideration or protection..." (16 USC § 1533[a][3].2; 16 USC § 1532[a]). This designated Critical Habitat is then afforded the same protection under the ESA as individuals of the species itself, requiring issuance of an Incidental Take Permit prior to any activity that results in "the destruction or adverse modification of habitat determined to be critical" (16 USC § 1536[a][2]).

Interagency Consultation and Biological Assessments

Section 7 of ESA provides a means for authorizing the "take" of threatened or endangered species by federal agencies, and applies to actions that are conducted, permitted, or funded by a federal agency. The statute requires federal agencies to consult with the USFWS or National Marine Fisheries Service (NMFS), as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of Critical Habitat for these species. If a Proposed Project "may affect" a listed species or destroy or modify Critical Habitat, the lead agency is required to prepare a biological assessment evaluating the nature and severity of the potential effect.

Habitat Conservation Plans

Section 10 of the federal ESA requires the acquisition of an Incidental Take Permit (ITP) from the USFWS by non-federal landowners for activities that might incidentally harm (or "take") endangered or threatened wildlife on their land. To obtain a permit, an applicant must develop a Habitat Conservation Plan that is designed to offset any harmful impacts the proposed activity might have on the species.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661 to 667e et seq.) applies to any federal Project where any body of water is impounded, diverted, deepened, or otherwise modified. Project proponents are required to consult with the USFWS and the appropriate state wildlife agency.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (The Eagle Act) (1940), amended in 1962, was originally implemented for the protection of bald eagles (Haliaeetus leucocephalus). In 1962, Congress amended the Eagle Act to cover golden eagles (Aquila chrysaetos), a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. This act makes it illegal to import, export, take (molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof. The golden eagle, however, is accorded somewhat lighter protection under the Eagle Act than that of the bald eagle.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 implements international treaties between the United States and other nations created to protect migratory birds, any of their parts, eggs, and nests from activities, such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor

propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (CFGC).

Executive Orders (EO)

Invasive Species – EO 13112 (1999): Issued on February 3, 1999, promotes the prevention and introduction of invasive species and provides for their control and minimizes the economic, ecological, and human health impacts that invasive species cause through the creation of the Invasive Species Council and Invasive Species Management Plan.

Migratory Bird – EO 13186 (2001): Issued on January 10, 2001, promotes the conservation of migratory birds and their habitats and directs federal agencies to implement the Migratory Bird Treaty Act. Protection and Enhancement of Environmental Quality – EO 11514 (1970a), issued on March 5, 1970, supports the purpose and policies of the National Environmental Policy Act (NEPA) and directs federal agencies to take measures to meet national environmental goals.

Migratory Bird Treaty Reform Act

The Migratory Bird Treaty Reform Act (Division E, Title I, Section 143 of the Consolidated Appropriations Act, 2005, PL 108–447) amends the Migratory Bird Treaty Act (16 U.S.C. Sections 703 to 712) such that nonnative birds or birds that have been introduced by humans to the United States or its territories are excluded from protection under the Act. It defines a native migratory bird as a species present in the United States and its territories as a result of natural biological or ecological processes. This list excluded two additional species commonly observed in the United States, the rock pigeon (Columba livia) and domestic goose (Anser domesticus).

Birds of Conservation Concern

Birds of Conservation Concern (BCC) is a USFWS list of bird species identified to have the highest conservation priority, and with the potential for becoming candidates for listing as federally threatened or endangered. The chief legal authority for BCC is the Fish and Wildlife Conservation Act of 1980 (FWCA). Other authorities include the FESA, the Fish and Wildlife Act of 1956, and the Department of the Interior U.S Code (16 U.S.C. § 701). The 1988 amendment to the FWCA (Public Law 100-653, Title VIII) requires the Secretary of the Interior, through the USFWS, to “identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973” (USFWS, 2008a).

State Regulations

California Fish and Game Code Sections 1600 through 1606 of the CFGC

This section requires that a Streambed Alteration Application be submitted to the CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the Department and the applicant is the Streambed Alteration Agreement. Often, Projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

California Endangered Species Act

The California Endangered Species Act (CESA) (Sections 2050 to 2085) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats by protecting "all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation." Animal species are listed by the CDFW as threatened or endangered, and plants are listed as rare, threatened, or endangered. However, only those plant species listed as threatened or endangered receive protection under the California ESA.

CESA mandates that state agencies do not approve a Project that would jeopardize the continued existence of these species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. There are no state agency consultation procedures under the California ESA. For Projects that would affect a species that is federally, and state listed, compliance with ESA satisfies the California ESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the California ESA under Section 2080.1. For Projects that would result in take of a species that is state listed only, the Project sponsor must apply for a take permit, in accordance with Section 2081(b).

Fully Protected Species

Four sections of the California Fish and Game Code (CFGC) list 37 fully protected species (CFGC Sections 3511, 4700, 5050, and 5515). These sections prohibit take or possession "at any time" of the species listed, with few exceptions, and state that "no provision of this code or any other law will be construed to authorize the issuance of permits or licenses to 'take' the species," and that no previously issued permits or licenses for take of the species "shall have any force or effect" for authorizing take or possession.

Bird Nesting Protections

Bird nesting protections (Sections 3503, 3503.5, 3511, 3513 and 3800) in the CFGC include the following:

Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.

Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys, and falcons, among others), and Strigiformes (owls).

Section 3511 prohibits the take or possession of Fully protected birds.

Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that Project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

Section 3800 prohibits the take of any non-game bird (i.e., bird that is naturally occurring in California that is not a gamebird, migratory game bird, or fully protected bird).

Native Plant Protection Act

The Native Plant Protect Act (NPPA) (1977) (CFGC Sections 1900-1913) was created with the intent to "preserve, protect, and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as endangered or rare and to protect endangered and rare plants from take. CESA (CFGC 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code.