

RANCHERO ROAD WIDENING PROJECT BIOLOGICAL REPORT

- Recording weather data including time, temperature, cloud cover, and wind speed at the beginning and end of the survey.

A rare plant survey was also conducted for the entire Project area. The survey consisted of traversing all potential habitat areas within the Project area and a 50 foot buffer. The survey was conducted during the spring, when conditions were most conducive to observations of rare plant species. All rare plant species observed were mapped on aerial photographs and their locations were recorded using handheld GPS units. Photographs were taken to document the presence of rare plant species.

3.0 RESULTS

The results section summarizes the results of the literature review and field surveys, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

The biological reconnaissance field survey was conducted on August 25, 2009 by ECORP biologists Ryan Gilmore and Brad Haley. Brad Haley is an Authorized Investigator on a California Department of Fish and Wildlife (DFG) Memorandum of Understanding for trapping studies of small mammals including the Mohave ground squirrel. The survey began at 0930 and continued until 1230. Survey conditions were 0% cloud cover, winds of 2-5 miles per hour, and a temperature of over 90° Fahrenheit (°F).

A rare plant survey was conducted on May 10 and 11, 2010 to survey for plant species identified as having potential to occur. This timeframe was determined in order to coincide with the time when most rare plant species would be blooming and most identifiable.

Parsons field staff conducted a field verification of jurisdictional resources on March 13, 2013.

3.1 Site Characteristics

The Project area contains undeveloped and developed property throughout its footprint, with a mixture of commercial, residential and industrial land uses. In addition to Ranchoero Road itself, various roads cross through the Project area and vehicular traffic on these roadways is a major source of disturbance. There is also some limited trash dumping occurring in the area. The California Aqueduct crosses the eastern portion of the Project area. The Southern Pacific Railroad crosses the western portion of the Project area.

The surrounding vicinity in the eastern portion of the Project area is mostly developed, dominated by commercial development, with some low to high density residential development farther from the Project area. The western half of the Project area has a larger percentage of undeveloped lands supporting native habitat types. Interstate 15 lies approximately 0.3 miles from the western end of the Project area.

The Project area slopes gently from the west to the east, with elevations ranging from approximately 3,425 to 3,824 feet above mean sea level (amsl).

3.2 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey, the Project area consists almost entirely of Hesperia loamy fine sand (2 to 5 percent slopes) and a small percentage of Cajon Sand (9 to 15 percent slopes). These soil types are deep, moderately well drained alluvial soils derived from granitic parent materials and are not considered hydric soils,

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indicating no former or current floodplain action or remnant alluvial fans exist in the majority of the Project area.

3.3 Waters and Wetlands

Several natural drainages cross Rancho Road, particularly within the portions of the roadway that traverse more natural area rather than the more developed portions. The extent to which these drainage features may be impacted by the proposed project has been analyzed in a separate report.

The site is located less than 4.75 miles west of the Mojave River, and drainages crossing the site would connect to this water body. Within the Project area, approximately 0.211 acre of potential jurisdictional Waters of the U.S. in the form of an ephemeral drainage exhibiting signs of OHWM is present and runs the course of 1,988 linear feet of drainage. In addition, the Project area supports 0.021 acre of potential non-jurisdictional Waters of the U.S. in the form of an erosional feature.

No potential jurisdictional wetlands were identified within the Project area. Impacts to potential Waters of the U.S. would entail 0.025 acres of impact to a total of 264 linear feet of ephemeral stream. Impacts to potential CDFW jurisdiction would entail 0.080 acre of impact to combined streambed, detention basin, and disturbed wetland areas (see Appendix D).

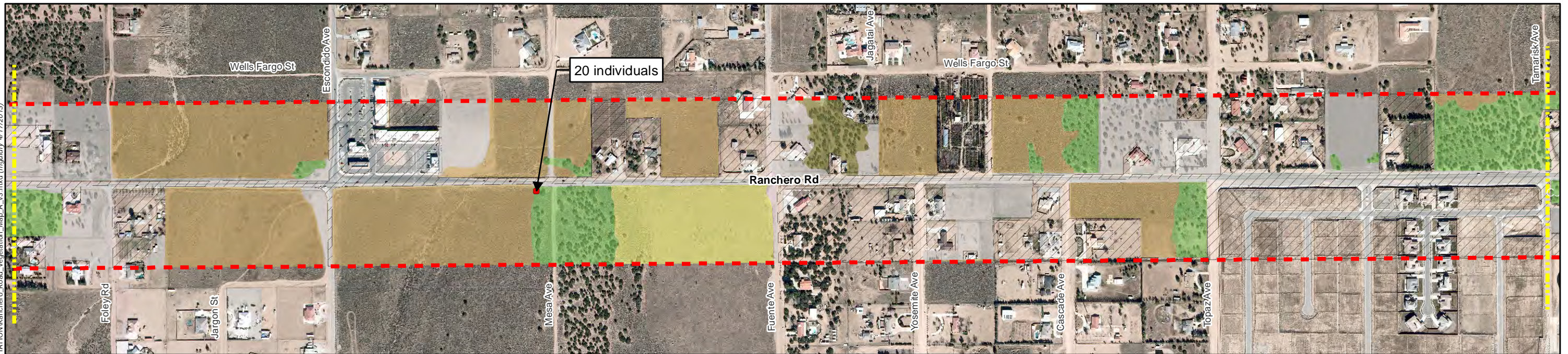
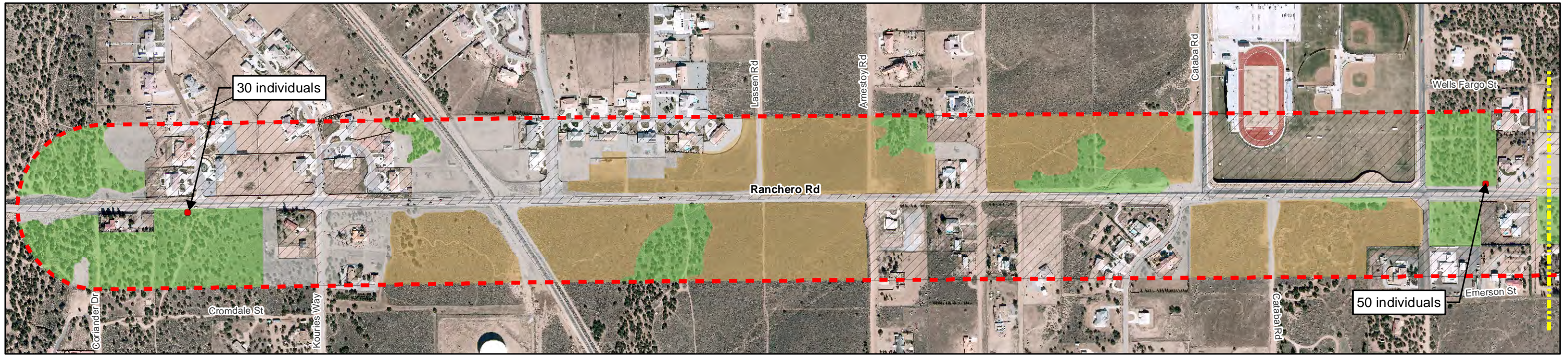
Table 1. Potential Waters of the U.S. within the Rancho Road Widening Project

Feature	Total Acreage¹	Linear Feet	Impacted Acreage¹	Impacted Linear Feet
Ephemeral drainage; jurisdictional	0.211	1988	0.025	264
Erosional feature, non-jurisdictional	0.021	231	0.016	174
Total	0.232	2219	0.041	438

¹ Acreages represent a calculated estimation and are subject to modification following the ACOE verification process.

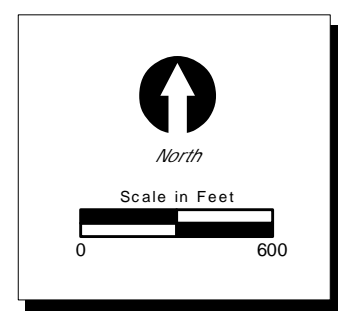
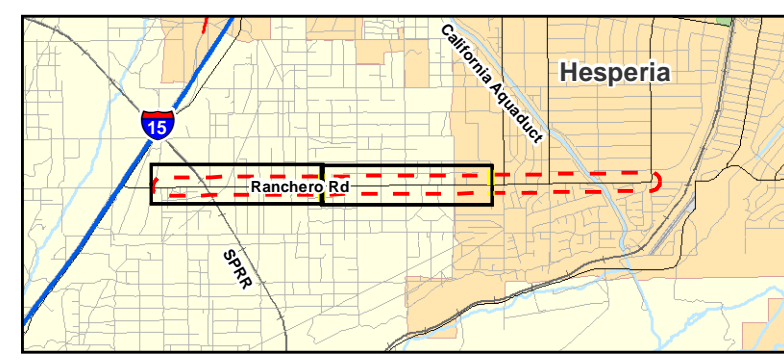
3.4 Vegetation Communities

The Project area is comprised of typical native desert plant communities found in this region of the western Mojave Desert, disturbed native desert plant communities, and various commercial and residential developments. Four vegetation communities were recorded within the Project area, in addition to disturbed and developed areas (Figures 3a and 3b). For acreages of plant communities and other areas within the Project see Table 2. The plant communities and disturbed and developed areas are described briefly below.



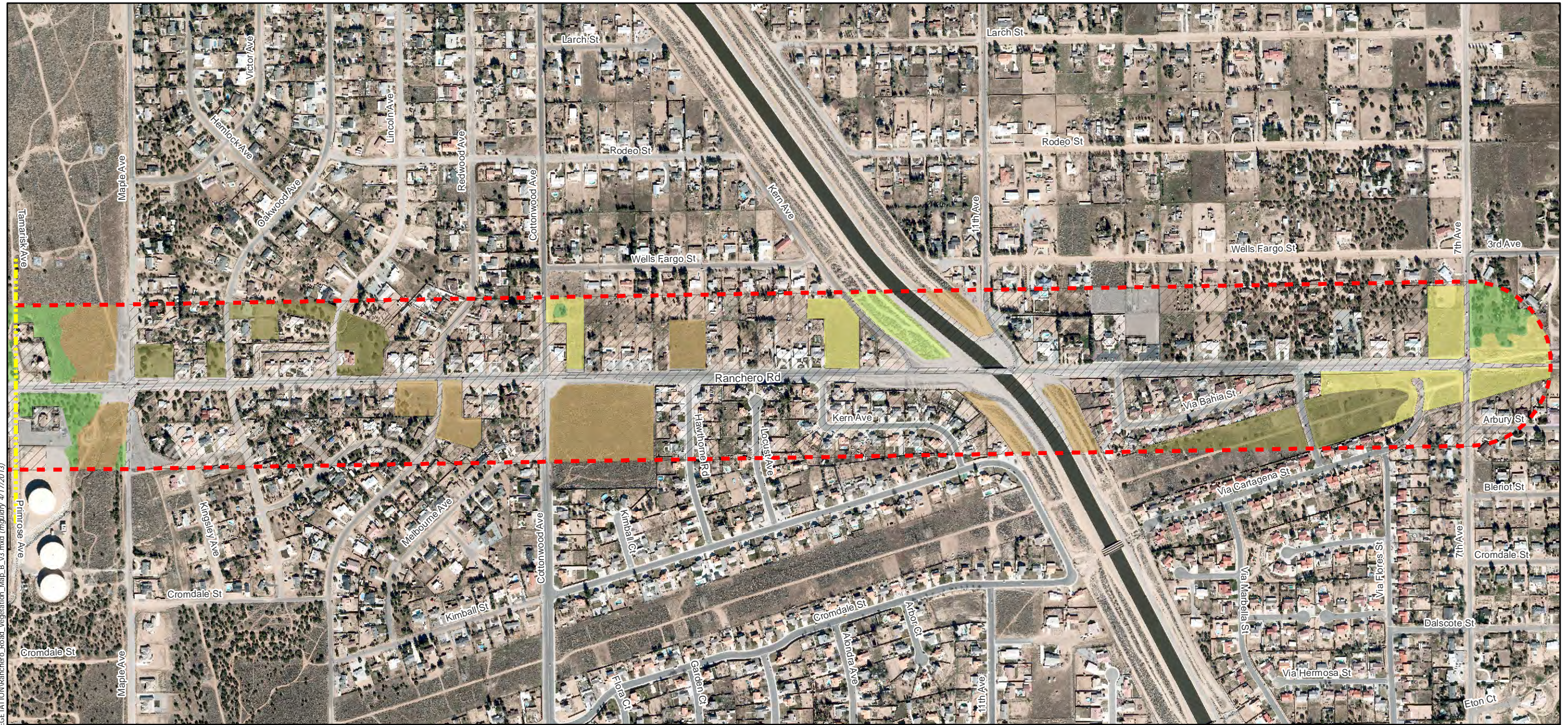
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- Matchlines
- Survey Area
- Sagebrush loeflingia
Loeflingia squarrosa var. *artemisarium*
- Vegetation Type**
- Developed - 308.52 ac
- Mojave Desert Scrub - 140.39 ac
- Disturbed - 69.98 ac
- California Juniper Woodland - 59.16 ac
- Disturbed Mojave Desert Scrub - 22.22 ac
- Disturbed Joshua Tree Woodland & California Juniper Woodland - 14.69 ac
- Atriplex Scrub - 2.16 ac

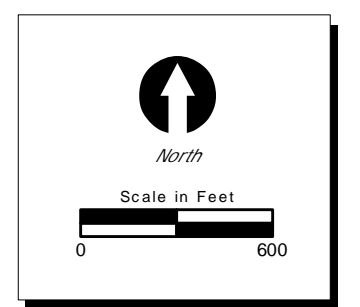
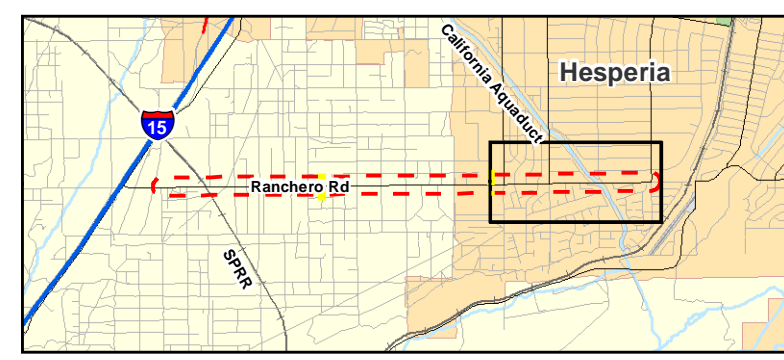
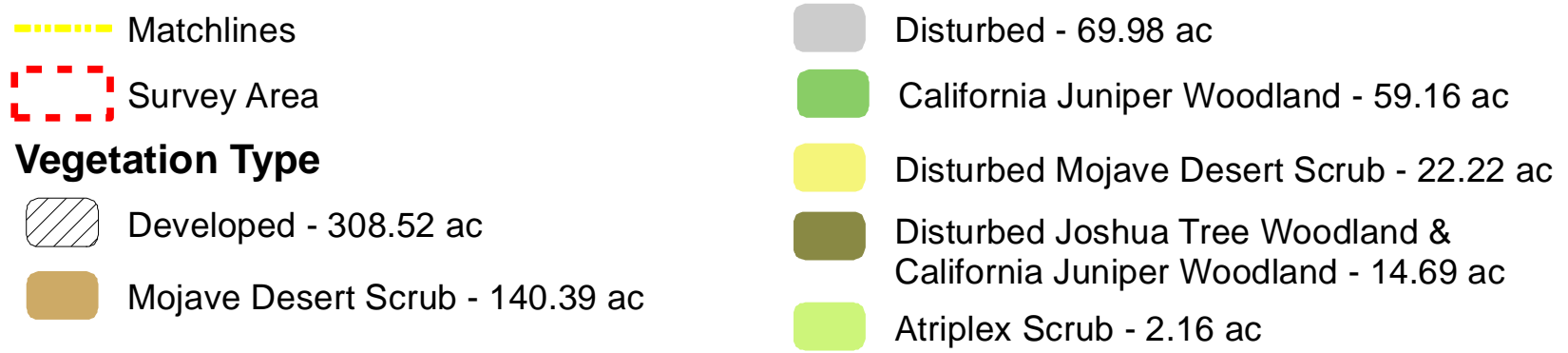


Map Date: 4/16/2013
Imagery Source: USGS 2011

Figure 3A. Vegetation Communities
2009-103 Parsons Ranchero Road



Location: N:\2009\2009-103 Parsons Rancho Road\MAPS\VEGETATION\Rancho Road_Vegetation_Map_B_v3.mxd (mguldray, 4/17/2013)



Map Date: 4/17/2013

Figure 3B. Vegetation Communities
2009-103 Parsons Rancho Road

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Table 2. Vegetation Community Acreages

Vegetation Community	Acres
Mojave Desert Scrub	140.39
Disturbed Mojave Desert Scrub	22.22
California Juniper Woodland	59.16
Disturbed Joshua Tree Woodland and California Juniper Woodland	14.69
Atriplex scrub	2.16
Disturbed	69.98
Developed	308.52
Total	617.12

Mojave Desert Scrub

The Mojave desert scrub community consists of widely spaced desert shrubs like white bursage (*Ambrosia dumosa*), cheesebush (*Hymenoclea salsola*), Nevada tea. Associated species include: occasional Joshua trees, Davidson's buckwheat (*Eriogonum davidsonii*), and small wirelettuce (*Stephanomeria* sp.). This plant community primarily occurs throughout the western half of the Project with varying levels of disturbance as it appears between developments. This is the most common plant community found within the Project. There are a total of 162.61 acres of this community within the Project area, of which 22.22 is considered to be disturbed in composition (see Table 2). A photo of this community within the Project area is shown in Figure 4a.

California Juniper Woodland

California juniper woodland occurred throughout the Project. California juniper (*Juniperus californica*) is the dominant species in this plant community. Associated species include Joshua tree (*Yucca brevifolia*), Dorr's sage (*Salvia dorr*), and California buckwheat (*Eriogonum fasciculatum*). This plant community occurs at three different points central to the Project with varying levels of disturbance as it appears between developments. There are a total of 59.16 acres of this community within the Project area (see Table 2). A photo of this community within the Project area is shown in Figure 4b.

Disturbed Joshua Tree Woodland and California Juniper Woodland

Joshua tree woodland and California juniper woodland intergrade and occur throughout the Project area. Joshua tree and California juniper are the dominant species in this community. Associated species include: Nevada tea (*Ephedra nevadensis*), peach thorn (*Lycium cooper*), cotton-thorn (*Tetradymia* sp.), buckhorn cholla (*Cylindropuntia acanthocarpa*), basin sagebrush (*Artemisia californica*), and California buckwheat. This plant community occurs throughout the western fourth of the Project with high levels of disturbance as it appears between developments. There are a total of 14.69 acres of this community within the Project area (see Table 2).

Atriplex Scrub

The atriplex scrub plant community within the Project consisted of the dominant species four-wing saltbush (*Atriplex canescens*). Associated species included telegraph weed (*Heterotheca grandiflora*) and California buckwheat. There was a small occurrence of this plant community located on the embankments of the California Aqueduct. There are a total of 2.16 acres of this community within the Project area. A photo of this community within the Project area is shown in Figure 4c.

Disturbed

Disturbed areas are those where natural vegetation has been altered such as by trampling, burning, or mechanical clearing. The soils in these areas are often highly compacted and may consist of barren ground. Usually disturbed habitats support only non-native or otherwise weedy species, such as Russian thistle (*Salsola tragus*), black mustard (*Brassica nigra*), and filaree (*Erodium* sp.). There are a total of 69.98 acres of this community within the Project area (see Table 2). A photo of this community within the Project area is shown in Figure 4d.

Developed

Developed portions of the Project area include the existing commercial and residential lots and other related features such as ornamental plantings of non-native species, remnant native species, or areas that are paved with little to no vegetation at all. All paved roadways are considered to be developed. There are often disturbed areas associated with development where weedy species persist. There are a total of 308.52 acres of this community within the Project area (see Table 2).



Figure 4a – Photo: Mojave Desert Scrub



Figure 4b – Photo: California Juniper Woodland



Figure 4c – Photo: Atriplex Scrub



Figure 4d – Photo: Disturbed Habitat

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A complete list of all plant species observed in the project area during the surveys is included as Appendix A.

3.5 Wildlife

Wildlife species observed or detected on the project site were characteristic of urbanized areas in the Mojave Desert region. The typical wildlife species observed during the site visit were California ground squirrel (*Spermophilus beecheyi*), Quail (*Callipepla* sp.), desert cottontail rabbit (*Sylvilagus audubonii*), common raven (*Corvus corax*), mockingbird (*Mimus polyglottos*), and black-tailed jackrabbit (*Lepus californicus*). Red-tailed hawk (*Buteo jamaicensis*). The low number of wildlife species detected is likely due to the high heat associated with the season in which the survey was conducted and the density of surrounding developed areas.

3.6 Special-Status Species

One special-status plant species, sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisarium*), was observed within the Project area during the focused rare plant surveys. This plant is a special status plant species but is not formally listed at either state or federal level, and its presence would not necessitate protocol surveys or an Incidental Take Permit with the agencies. The plant's distribution within the Project area is described below. A complete list of special-status plant species documented in the literature search is included in Appendix B.

Sagebrush loeflingia is a CNPS List 2.2 and BLM sensitive annual herb that is found in sandy or within great basin scrub, Sonoran desert scrub, and desert dune habitats at elevations ranging from 2,297 to 3,937 ft (700 to 1,200 m) amsl. Three stands of this plant were observed within the Project area in California Juniper Woodland, in stands ranging from 20 to 50 individuals. One stand of 30 individuals was observed at the western end of the Project area, along the south side of Ranchoero Road. A second stand of 50 individuals was observed west of Foley Road and north of Ranchoero Road. A third stand was observed just west of Mesa Avenue and south of Ranchoero Road. Common associates with each of these plant stands included Dorr's sage and California juniper.

There is suitable habitat in the Project area for six of the 16 other special-status documented in the literature search. These species are discussed individually below. All of these plant species would have been expected to have been observed during focused rare plant surveys had they been present within the Project area.

Mojave milkweed (*Asclepias nyctaginifolia*) is a CNPS List 2.1 perennial herb species that occurs in Mojave desert scrub and pinyon-juniper woodland habitats at elevations ranging from 3,280 to 5,576 ft (feet) (1,000 to 1,700 m (meters)) amsl (above mean sea level). There is limited suitable habitat for the Mojave milkweed within the Project area. A record exists 4 miles to the southwest of the Projects western terminus in the Cajon Pass region (CNDDDB 2009). If present, this plant would likely have been observed during focused rare plant surveys.

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Booth's evening primrose (*Camissonia boothii* ssp. *boothii*) is a CNPS List 2.3 annual herb. The evening primrose occurs in Joshua tree woodland and pinyon-juniper woodland habitats at elevations from 2,953 to 7,874 ft (900 to 2,400 m) amsl. Suitable habitat exists for Booth's evening primrose in the Project area. A record exists 3 miles to the northeast of the Projects eastern terminus (CNDDDB 2009). If present, this plant would likely have been observed during focused rare plant surveys.

Pygmy poppy (*Canbya candida*) is a CNPS List 4.2 annual herb that is endemic to California. It occurs in gravelly or sandy sites within creosote bush scrub and Joshua tree woodland habitats at elevations ranging from 1,969 to 4,790ft (600 to 1,460 m) amsl. Suitable habitat exists for pygmy poppy in the Project area. A record exists 1 mile to the south of the Project area (CNDDDB 2009). If present, this plant would likely have been observed during focused rare plant surveys.

White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) is a CNPS List 1B.2 annual herb that is found in sandy or gravelly Mojave desert scrub and pinyon-juniper woodland habitats at elevations ranging from 984 to 3,936 ft (300 to 1,200 m) amsl. Suitable habitat exists for white-bracted spineflower in the Project area. A record exists 9.9 miles to the southwest of the Projects western terminus in the Cajon Pass region (CNDDDB 2009). If present, this plant would likely have been observed during focused rare plant surveys.

Short-joint beavertail cactus (*Opuntia basilaris* var. *brachyclada*) is a CNPS List 1B.2 stem succulent that is endemic to California. It occurs within a variety of habitats including; chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon-juniper woodland, and riparian woodland at elevations ranging from 1,394 to 5,906 ft (425 to 1,800 m) amsl. Suitable habitat exists for the beavertail cactus in the Project area. A record exists 1 mile to the southeast of the Projects eastern terminus (CNDDDB 2009). If present, this plant would likely have been observed during focused rare plant surveys.

Golden violet (*Viola aurea*) is a CNPS List 2.2 perennial herb that is found in sandy regions within great basin scrub and pinyon-juniper habitats at elevations ranging from 3,280 to 6,691 ft (1,000 to 2,040 m) amsl. There is limited suitable habitat for the golden violet within the Project area. A record exists 4 miles to the southwest of the Projects western terminus in the Cajon Pass region (CNDDDB 2009). If present, this plant would likely have been observed during focused rare plant surveys.

Of the 21 wildlife species documented by the CNDDDB, suitable habitat is present for only nine wildlife species, which are discussed individually below. A complete list of special-status wildlife species documented in the literature search is included in Appendix C.

The desert tortoise (*Gopherus agassizii*) is a federal and state-listed threatened species. Tortoises inhabit desert habitats with friable soils in which it constructs burrow and nest sites. However, tortoises are highly susceptible to disturbances and they usually don't occur near highly developed areas or areas that are highly populated. The Project area contains a relatively small area of marginal habitat with several disturbances including urban

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developments, foot traffic, trash dumping, and vehicle traffic. Even though there is natural habitat present within the Project area, the surrounding area, developed with residential and commercial properties, with little remaining undisturbed desert vegetation. The Project area is effectively within an island of habitat that has very tenuous connectivity to any large open space areas with high quality habitat. No desert tortoises or desert tortoise sign were observed during the habitat assessment. No records of desert tortoise were found in Hesperia in the CNDDDB, and the nearest record was in northern Adelanto, more than 1.25 miles northwest of the western terminus of the Project area.

Several factors have extirpated tortoises from the more urban portions of the high desert, including habitat fragmentation, trash dumping, urban edge effects, predation by pets and ravens, and collection of tortoises by individuals for the pet trade or for personal pets. The Project area likely supported desert tortoises in the past, and although natural creosote bush scrub does still occur nearby, the various developmental pressures and associated urban edge effects are thought to have extirpated the desert tortoise from the Project area.

The Mohave ground squirrel (*Spermophilus mohavensis*) a state-listed threatened species that is found in desert scrub, alkali scrub, and Joshua tree woodland habitats. Winterfat (*Kraschennikoviana lanata*) and spiny hopsage (*Grayia spinosa*) are the known food plants for the species. The Project area is within the home range of the species, but none of the habitat elements that support this species were present in the Project area and no potential burrow locations were observed during the survey.

Several observations of this species were recorded in the CNDDDB database, but only one record was from Hesperia. This record was from 1931, over 75 years ago, when the area was less developed and the habitat was less fragmented. The record indicates that the observation was made approximately 3 miles northeast of the eastern terminus of the Project area, located west of Hesperia Road and south of Main Street, in an area that is now commercially developed. The next closest recorded sightings are two observations located approximately 4.5 and 7 miles to the north of the Project area, respectively, across large tracts of developed lands and Interstate 15. The seven mile distant sighting was made in 1977, while the other was made in 2005. It is unknown if the most recent sighting was made during a trapping effort or not. The CNDDDB indicates that MGS has never been observed within the Project area.

Only marginal suitable habitat occurs on the site, with very limited connectivity to other fragmented habitat with urban portions of Hesperia and Apple Valley. Nearly all of the historic sightings of MGS date back to more than 30 years ago. The one most recent sighting is separated from the Project area by Interstate 15 and large amounts of developed residential properties. Although the site does support natural desert habitat, its isolation, lack of constituent habitat elements for the MGS (i.e., food plants and burrows) and lack of nearby recent sightings of MGS lead to the conclusion that the MGS would not occur within the Project area.

The burrowing owl (*Athene cunicularia*) is a CSC species, but it typically requires special mitigation measures due to its rarity and decline across California. Burrowing owls occupy a

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variety of habitats in California including open scrub, grassland, agricultural areas, and other habitats with low-lying vegetation. They are often found in association with the common California ground squirrel, modifying the burrows of this mammal for their own use. In addition to natural burrows, burrowing owls will use various types of debris piles, cliffs, culverts and other man-made structures as burrows. The Project area supports open scrub habitats and grassland, both suitable habitats for burrowing owl use. Although no burrows were directly observed, the area has high potential for burrows to be present in the various debris piles and other types of non-natural substrate that is present on-site.

No burrowing owls or burrowing owl burrows were observed during the habitat assessment. There are multiple occurrences of burrowing owl within 10 miles of the project area, and several locations within 5 miles of the Project area. The nearest recorded concentrations of owls are located 6 to 7 miles northwest of the Project area, along Bear Valley Road (CNDDDB 2009).

Although no burrowing owls seem to be currently present within the Project area, the area supports suitable habitat for this species and potential burrow locations. Therefore, the burrowing owl has a high potential to occur.

The San Diego coast horned lizard (*Phrynosoma coronatum blainvillei*) is a state CSC species and United States Forest Service listed sensitive species associated with open stages of dry scrub with ample ant prey. Suitable habitat exists within the Project area with the closest known record is located 3.5 miles southwest of the western terminus of the Project area (CNDDDB 2009). Therefore this species has a high potential to occur.

The coastal western whiptail (*Aspidoscelis tigris stejnegeri*) is a state CSC species associated with deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Suitable habitat exists within the Project area with the closest known record is located 8 miles southwest of the western terminus of the Project area (CNDDDB 2009). Therefore this species has a moderate potential to occur.

The Cooper's hawk (*Accipiter cooperii*) is a state watch list species typically associated with riparian and oak woodlands. No suitable nesting habitat exists within the Project area and the closest known record is located 2 miles north of the eastern terminus of the Project area (CNDDDB 2009). This species may hunt for prey within the habitats found within the Project area. Therefore this species has a low potential to occur.

The Le Conte's thrasher (*Toxostoma lecontei*) is a state CSC species and BLM listed sensitive species typically associated with desert habitats containing dense, shrubs for nesting. Suitable habitat exists within the Project area with the closet known record is located 3.25 miles northeast of the eastern terminus of the Project area (CNDDDB 2009). Therefore this species has a moderate potential to occur.

The gray vireo (*Vireo vicinior*) is a state CSC species and BLM listed sensitive species typically associated desert, chaparral, woodland habitats. Suitable habitat exists within the Project area

with the closest known record is located 1.25 miles east of the eastern terminus of the Project area (CNDDDB 2009). Therefore this species has a high potential to occur.

The American badger (*Taxidea taxus*) is a CSC species associated with open stages of dry scrub, forest and herbaceous habitats. The badger requires large areas of open uncultivated ground for foraging and friable soils for digging. Suitable habitat exists within the Project area, but no observations of this species have been documented in the nearby vicinity and it does not have adjacent large areas of habitat preferred by the badger. Therefore this species has a low potential to occur.

3.7 Raptors and Migratory Birds

All raptor species are protected from "take" pursuant to California Fish and Game Code Section 3503.5. Raptors and migratory birds are protected by the MBTA. Raptor species include top-level predators such as the red-tailed hawk (*Buteo jamaicensis*) and golden eagle (*Aquila chrysaetos*). These birds of prey typically nest in tall trees. There are exceptions, such as the burrowing owl discussed above and the American kestrel (*Falco sparverius*) that nests in smaller trees and even shrubs on occasion.

The list of protected migratory birds includes most native bird species and excludes a handful of exotic, introduced species such as the European starling (*Sturnus vulgaris*). Active nesting sites of these species are protected from removal by the MBTA regulations. Species expected to be using the shrubs and trees within the Project area include common desert species such as house finch (*Carpodacus mexicanus*), mourning dove (*Zenaidura macroura*), common raven (*Corvus corax*), and northern mockingbird (*Mimus polyglottus*). In addition, it is possible that more uncommon species such as the loggerhead shrike (*Lanius ludovicianus*) could use the various plant life within the Project area as nesting habitat.

3.8 Wildlife Movement Corridors

Linkages and corridors facilitate local and regional animal movement, and are generally centered around waterways, riparian corridors, flood control channels, and even natural and artificial trails and roads. Drainages generally serve as preferred movement corridors for many species because wildlife can move hidden through these areas and fresh water is periodically available. Corridors also offer wildlife unobstructed terrain to forage and they allow for the safe dispersal of young individuals. The type of animal that potentially uses a corridor is closely associated with the width and length of the corridor, size of connecting open spaces, and the amount of available cover along the corridor route.

The Project area is characterized by a rural residential character, with developed lots interspersed by undeveloped natural parcels. The western portions of the Project area are generally less developed and more native in character. Wildlife likely cross Ranchoero Road at a number of different locations along its length, with no preference being clear. However Oro Grande Wash occurs at the far western end of the Project area, and likely acts as a major

wildlife movement corridor due to its size and position in the landscape. Wildlife will likely cross at where there is undeveloped land on both sides of the road; this occurs at various locations throughout the Project site. The Project occurs along an existing roadway and is not expected to interfere with existing wildlife movement.

3.9 Protected Native Plants

The property contains California Juniper and Joshua trees, which are protected under the City of Hesperia Municipal code. Title 16 Development Code, Chapter 16.24 Protected Plants requires that: "land use applications, building permits and all other development permits (e.g., grading, mobile home set downs, etc.), shall consider and include a review of any proposed native tree or plant removal. Any approved land use application and/or development permit shall be a permit for the removal of native trees or plants, if such land use application or development permit specifically reviews and approves such removals." Trees that must be inventoried include any desert native trees and/or plants with stems two inches or greater in diameter or a height of six feet or greater including California junipers, smoke tree (*Psoralea* spp.), mesquite (*Prosopis* spp.), creosote trees ten feet or greater in diameter, all Joshua trees, all plants protected or regulated by the State Desert Native Plants Act, and all riparian vegetation (within 200 feet of a stream) (Hesperia, 2008).

4.0 CONCLUSIONS

The Project area consists primarily of developed areas, Mojave desert scrub, California juniper woodland, and Joshua tree woodland habitats with disturbed areas associated with north-south roads that cross through it. Based on a database search and the biological reconnaissance survey site visit, it was determined that limited suitable habitat exists in the Project area for seven special-status plant species and nine special-status wildlife species.

One special-status plant species, sagebrush loeflingia, was observed during the survey work but due to its location it is not expected to be affected by the Project. Even if it were to be impacted, impacts to this plant would not necessitate the completion of an Incidental Take Permit due to its relatively low level of sensitivity. Mojave milkweed, Booth's evening primrose, pygmy poppy, white-bracted spineflower, and short-joint beavertail are the only other special-status plant species documented in the literature search that have potential to occur in the Project area. These rare plant species would likely have been observed if present during the rare plant surveys. No further protocol surveys for rare plant species are recommended, a

The Project contains many occurrences of Joshua tree and California juniper which are pursuant to Section 16.24.150 of Hesperia's Protected Plant Ordinance. This provision states that listed desert plants in the municipal code are to be regulated and in some instances protected. The removal of such plant species would require a removal permit granted by the city of Hesperia.

The Project area contains marginal habitat for the state- and federally-listed threatened desert tortoise and the state-listed threatened Mohave ground squirrel, but these species are not expected to be present due to their overall scarcity in the site vicinity and disturbances present. Disturbances that would deter these species from inhabiting the site include trash dumping and vehicle traffic. Additionally, it is located within a highly developed region, and is relatively isolated from large tracts of high quality open desert. The nearest large area of un-fragmented habitat is located approximately six miles northwest of the western terminus of the Project area. Due to these factors, it is suspected that the desert tortoise and Mohave ground squirrel are likely to be extirpated from the Project area. No focused surveys for these species are recommended, nor are pre-construction surveys or other mitigation measures likely to be necessary.

The burrowing owl, a CSC species, has a high potential to occur in the project area. It is recommended that the Project construction avoid the burrowing owl breeding season (March 1 to August 31). A focused burrow survey, four burrowing owl surveys, and a pre-construction survey are necessary to determine the presence or absence of burrowing owls on the site. All surveys shall be conducted by a qualified biologist. Both the focused burrow and burrowing owl surveys shall be done within a year of the start of the project, and it is recommended that they occur during the breeding season. The pre-construction survey is required to occur within 30 days prior to ground disturbing activities. If there are resident owls found on the pre-construction survey during the wintering season (September 1 to February 31), protocol

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exclusion is recommended to be conducted by a qualified biologist. If resident owls are found during the breeding season, the owls cannot be disturbed until the biologist determines that the young have fledged. If evidence of desert tortoise or Mohave ground squirrel presence is observed during pre-construction surveys, consultation with CDFW and USFWS would be required prior to construction.

Migratory birds that are protected by the MBTA have potential to nest within the shrubs in the Project area. Seasonal avoidance of the bird nesting season (March 1 to August 31) is recommended in order to avoid take of nesting birds. A pre-clearance nesting bird survey by a qualified biologist and establishment of buffer zones around active nests (as appropriate) will be required if construction is to occur during the bird nesting season (March 1 to August 31). This survey may be conducted concurrently with the pre-construction burrowing owl survey.

Several drainages cross the Project area, at various locations. A separate wetland delineation survey was conducted by ECORP that details the extent of the jurisdictional waters on the site (2009). Within the Project area, approximately 0.211 acre of potential jurisdictional Waters of the U.S. in the form of an ephemeral drainage exhibiting signs of OHWM is present and runs the course of 1,988 linear feet of drainage. In addition, the Project area supports 0.021 acre of potential non-jurisdictional Waters of the U.S. in the form of an erosional feature. No potential jurisdictional wetlands were identified within the Project area. Impacts to potential Waters of the U.S. would entail 0.025 acres of impact to a total of 264 linear feet of ephemeral stream. Impacts to potential CDFW jurisdiction would entail 0.080 acre of impact to combined streambed, detention basin, and disturbed wetland areas. Impacts to jurisdictional features would require permitting with the appropriate agency (CDFW, ACOE and/or SRWQCB).

5.0 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 the applicant's representative and that I have no financial interest in the project.

DATE: 10/27/2011

SIGNED:



Mr. Scott Taylor
(Senior Biological Project Manager)

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LIST OF APPENDICES

- Appendix A. Plant Species Observed Within the Project Area
- Appendix B. Special-Status Plant Species Documented in the Database Search
- Appendix C. Special-Status Animal Species Documented in the Database Search
- Appendix D. ACOE and CDFW Delineation

APPENDIX A

Plant Species Observed Within the Project Area

Scientific Name	Common Name
VASCULAR PLANTS	
GYMNOSPERMS	
CUPRESSACEAE	CYPRESS FAMILY
<i>Juniperus californica</i>	California juniper
EPHEDRACEAE	EPHEDRA FAMILY
<i>Ephedra nevadensis</i>	Nevada tea
ANGIOSPERMS (DICOTYLEDONS)	
ASTERACEAE	SUNFLOWER FAMILY
<i>Ambrosia acanthicarpa</i>	annual bur-sage
<i>Artemisia tridentata</i>	basin sagebrush
<i>Ericameria nauseosus</i>	common rabbitbrush
<i>Heterotheca grandiflora</i>	telegraph weed
<i>Isocoma menziesii</i>	Menzies' goldenbush
<i>Lactuca serriola</i> *	prickly wild lettuce
<i>Stephanomeria</i> cf. <i>exigua</i>	small wire-lettuce
<i>Tetradymia stenolepis</i>	Mojave cotton-thorn
BORAGINACEAE	BORAGE FAMILY
<i>Amsinckia menziesii</i>	fiddleneck
BRASSICACEAE	MUSTARD FAMILY
<i>Brassica nigra</i> *	black mustard
CACTACEAE	CACTUS FAMILY
<i>Cylindropuntia acanthocarpa</i>	buck horn cholla
CHENOPODIACEAE	GOOSEFOOT FAMILY
<i>Atriplex canescens</i>	fourwing saltbush
<i>Salsola tragus</i> *	Russian thistle
GERANIACEAE	GERANIUM FAMILY
<i>Erodium cicutarium</i> *	red-stemmed filaree
LAMIACEAE	MINT FAMILY
<i>Salazaria mexicana</i>	bladdersage
<i>Salvia dorrii</i>	desert sage
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Eriogonum davidsonii</i>	Davidson's buckwheat
<i>Eriogonum fasciculatum</i>	California buckwheat

SALICACEAE	SALIX FAMILY
<i>Salix</i> sp.	willow
ZYGOPHYLLACEAE	CALTROP FAMILY
<i>Tribulus terrestris</i> *	puncture vine
ANGIOSPERMS (MONOCOTYLEDONS)	
LILIACEAE	LILY FAMILY
<i>Yucca brevifolia</i>	Joshua tree
POACEAE	GRASS FAMILY
<i>Achnatherum hymenoides</i>	Indian rice grass
<i>Bromus diandrus</i> *	ripgut brome
<i>Bromus rubens</i> *	foxtail chess
<i>Bromus tectorum</i> *	cheat grass
<i>Cynodon dactylon</i> *	Bermuda grass
<i>Eragrostis</i> sp.	lovegrass
<i>Polypogon</i> sp.	beard grass*
*Non-native species	

APPENDIX B

Special-Status Plant Species Documented in the Database Search

Name (Scientific/Common)	CNDDDB Ranks	Other Lists	Listing Status
Camissonia boothii ssp. boothii Booth's evening-primrose	G5T4 S2.3	CNPS: 2.3	Fed: None CDFW: None
Canbya candida white pygmy-poppy	G3 S3.2	CNPS: 4.2	Fed: None CDFW: None
Asclepias nyctaginifolia Mojave milkweed	G4G5 S1	CNPS: 2.1	Fed: None CDFW: None
Chorizanthe xanti var. leucotheca White-bracted spineflower	G4T2 S2.2	CNPS: 1B.2	Fed: None CDFW: None
Loeflingia squarrosa var. artemisiarum sagebrush loeflingia	G5T2T3 S2.2	CNPS: 2.2	Fed: None CDFW: None
Opuntia basilaris var. brachyclada short-joint beavertail	G5T1 S1.2	CNPS: 1B.2	Fed: None CDFW: None

Ranking Levels:

CNDDDB Species or Community Level

G1 = Less than 6 viable element occurrences (EOs) OR less than 1,000 individuals OR less than 2,000 acres.

G2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres.

G3 = 21-80 EOs OR 3,000-10,000 individuals OR 10,000-50,000 acres.

G4 = Apparently secure; this rank is clearly lower than G3 but factors exist to cause some concern; i.e., there is some threat, or somewhat narrow habitat.

G5 = Population or stand demonstrably secure to ineradicable due to being commonly found in the world.

State Ranking

The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank.

S1 = Less than 6 EOs OR less than 1,000 individuals OR less than 2,000 acres

S1.1 = very threatened

S1.2 = threatened

S1.3 = no current threats known

S2 = 6-20 EOs OR 1,000-3,000 individuals OR 2,000-10,000 acres

S2.1 = very threatened

S2.2 = threatened

S2.3 = no current threats known

S3 = 21-80 EOs or 3,000-10,000 individuals OR 10,000-50,000 acres

S3.1 = very threatened

S3.2 = threatened

S3.3 = no current threats known

S4 = Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern; i.e. there is some threat, or somewhat narrow habitat. NO THREAT RANK.

S5 = Demonstrably secure to ineradicable in California. NO THREAT RANK.

APPENDIX C

Special-Status Animal Species Documented in the Database Search

Name (Scientific/Common)	CNDDDB Ranks	Other Lists	Listing Status
<i>Accipiter cooperii</i> Cooper's hawk	G5 S3	CDFW: SC	Fed: None Cal: None
<i>Asio otus</i> long-eared owl	G5 S3	CDFW: SC	Fed: None Cal: None
<i>Athene cunicularia</i> burrowing owl	G4 S2	CDFW: SC	Fed: None Cal: None
<i>Dendroica petechia brewsteri</i> yellow warbler	G5T3? S2	CDFW:	Fed: None Cal: None
<i>Gopherus agassizii</i> desert tortoise	G4 S2	CDFW: SC	Fed: Threatened Cal: Threatened
<i>Phrynosoma coronatum</i> <i>(blainvillii population)</i> coast (San Diego) horned lizard	G4G5 S3S4	CDFW:	Fed: None Cal: None
<i>Spermophilus mohavensis</i> Mohave ground squirrel	G2G3 S2S3	CDFW: SC	Fed: None Cal: Threatened
<i>Toxostoma lecontei</i> Le Conte's thrasher	G3 S3	CDFW: SC	Fed: None Cal: None
<i>Vireo vicinior</i> gray vireo	G4 S2	CDFW:	Fed: None Cal: None

APPENDIX D

ACOE and CDFW Delineation