

**GENERAL BIOLOGICAL RESOURCES
REPORT**

**40-ACRE RESIDENTIAL LANCASTER PROJECT
CITY OF LANCASTER
COUNTY OF LOS ANGELES, CALIFORNIA**

LSA

March 2015

GENERAL BIOLOGICAL RESOURCES REPORT

40-ACRE RESIDENTIAL LANCASTER PROJECT CITY OF LANCASTER COUNTY OF LOS ANGELES, CALIFORNIA

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LSA Project No. MEV1501

LSA

March 2015

EXECUTIVE SUMMARY

LSA Associates, Inc. (LSA) was retained by Meridian Land Development to prepare a general biological resources assessment on the approximately 40-acre (ac) proposed project site located in the City of Lancaster, Los Angeles County, California. The proposed project site is currently vacant land that is bordered by West Avenue K to the north, 55th Street West to the west, and by West Avenue K-8 to the south. Both of the latter two roads are unimproved. The eastern project boundary is bordered by vacant land and rural residential buildings. Vegetation on the proposed project site consists of nonnative annual grasses/herbs, disturbed saltbush scrub, and mixed Joshua tree saltbush scrub.

Field surveys were conducted on January 20 and 21, 2015, by LSA Associate/Biologist Leo Simone. Biological observations recorded during the field surveys are included in this general biological resources report, and a complete list of plant and animal species observed is provided in Appendix A. Joshua trees (*Yucca brevifolia*) are considered a sensitive natural plant community. Compliance with the California Desert Native Plants Act, California Food and Agricultural Code, Division 23, requires a permit be obtained for Joshua tree removal. A Joshua tree permit would be obtained from the County of Los Angeles Land Development Coordinating Center.

Two fossorial mammal burrows were found on site of a size that could potentially be used by burrowing owls (*Athene cunicularia*); however, neither owls nor their sign were observed on the proposed project site during the January 2015 biological reconnaissance level surveys. LSA recommends that focused protocol breeding season burrowing owl surveys be conducted over the entire site following the California Department of Fish and Wildlife (CDFW) (formerly the California Department of Fish and Game) survey and monitoring guidelines provided in the *March 2012 California Department of Fish and Game Staff Report on Burrowing Owl Mitigation*.

LSA recommends that removal of vegetation be conducted between September 1 and January 31 (outside the bird nesting season) to avoid any impacts to nesting raptors or other birds protected by the California Fish and Game Code and the Migratory Bird Treaty Act. If vegetation removal is to occur during the nesting bird season (February 1 through August 31), a preconstruction nesting survey is recommended to be conducted by a qualified biologist prior to vegetation removal.

There are no waters present on the proposed project site that would require compliance with Sections 401 and 404 of the federal Clean Water Act (CWA) or Section 1602 of the California Fish and Game Code; therefore, a formal delineation of jurisdictional waters will not be required for the proposed project site.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
INTRODUCTION	1
METHODS	1
Literature Search	1
General Biological Survey	3
RESULTS AND DISCUSSION.....	3
Existing Site Conditions	3
Topography and Soils.....	3
Vegetation	8
Wildlife	9
Potential Jurisdictional Waters	11
IMPACTS.....	11
Special-Interest Plant Communities	11
Threatened and Endangered Species	11
Nonlisted Special-Interest Species	12
Habitat Fragmentation and Wildlife Movement.....	12
Jurisdictional Waters	13
Local Plans, Policies, and Ordinances.....	13
Cumulative Effects.....	14
MITIGATION RECOMMENDATIONS	14
Burrowing Owl.....	14
Joshua Trees	16
Raptors and Migratory Birds.....	16
REFERENCES.....	17

FIGURES

Figure 1: Regional and Project Location.....	2
Figure 2: Vegetation & Photo Location Map	4
Figure 3: CNDDB Occurrences within 5 Miles of Project.....	5
Figure 4: Site Photographs	6

APPENDICES

- A: LIST OF PLANT AND ANIMAL SPECIES OBSERVED
- B: SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

INTRODUCTION

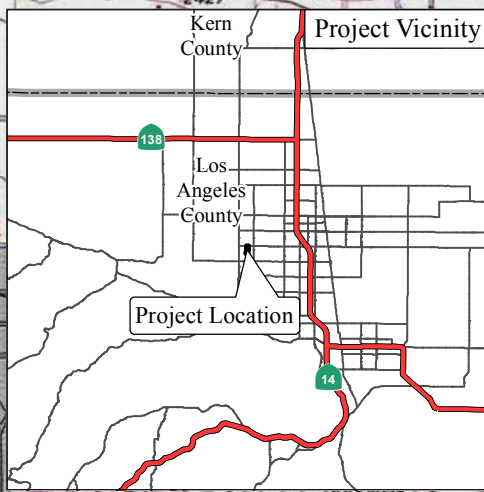
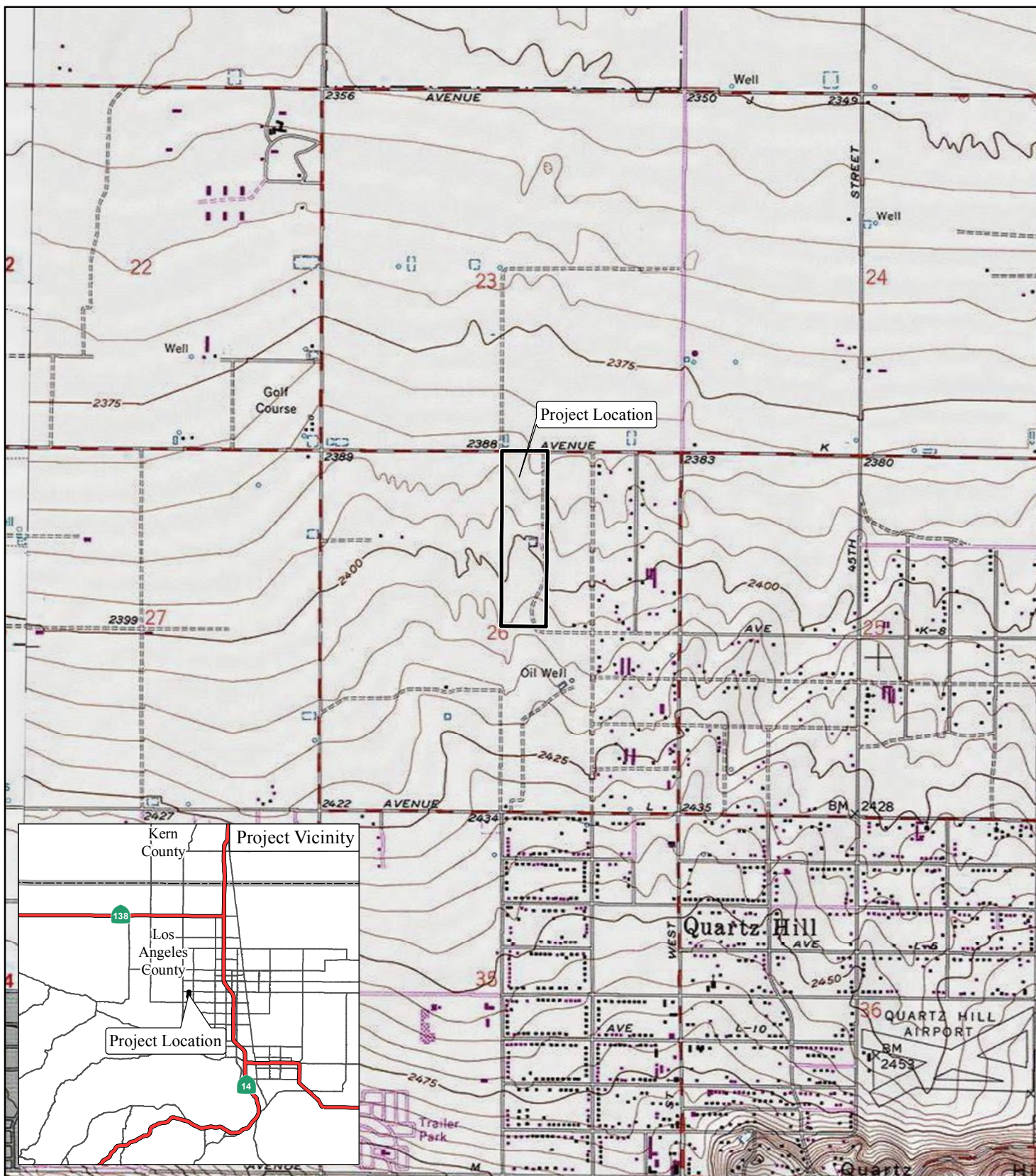
LSA Associates, Inc. (LSA) conducted a general biological resource assessment on the proposed 40-acre (ac) Residential Lancaster Project (project) site located in the western portion of the City of Lancaster, Los Angeles County, California. Geographically, the proposed project site is located within Section 26 of Township 7 North, Range 13 West, as shown on the United States Geological Survey (USGS) *Lancaster West, California* 7.5-minute topographic quadrangle map (Figure 1).

This report presents the results of a literature review and field surveys for biological resources. The project is located in the southern Antelope Valley at the southwestern end of the Mojave Desert. Elevation of the relatively flat project site ranges from approximately 2,390 to 2,410 feet (ft) above mean sea level (amsl). The site is bordered by West Avenue K to the north, 55th Street West to the west, and by West Avenue K-8 to the south. Both of the latter two roads are unimproved. The project site, located on the valley floor, is characterized by undeveloped land that is composed of friable, sandy soils primarily consisting of decomposed granite. Natural vegetation consists of disturbed saltbush scrub on the southern half of the property, with much of the southernmost ¼ of the property consisting of mixed disturbed Joshua trees (*Yucca brevifolia*) and saltbush scrub vegetation. The northern half of the property is dominated by nonnative grasses and herbs. The land east of the project site consists of vacant land and rural residential buildings. The adjacent land to the south and west of the project site consists of Joshua tree and juniper woodland. The land north of the project site consists of Joshua tree woodland, desert scrub, and grasslands.

METHODS

Literature Search

As part of the general biological assessment, a literature review and records search was conducted to assist in determining the existence or potential occurrence of special-interest plant and animal species on site or in the vicinity of the site. Database records for the *Lancaster West, Del Sur, Little Buttes, Rosamond, Rosamond Lake, Ritter Ridge, Sleepy Valley, Palmdale, and Lancaster East, California* USGS 7.5-minute quadrangles were searched on January 19, 2015, using the California Department of Fish and Wildlife (CDFW) Natural Diversity Database (CNDDB) *Rarefind 5* (CDFW 2015). A records search of the California Native Plant Society's (CNPS) *Electronic Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2015); United States Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System List (IPaC; January 2015); and CDFW Sensitive Species Lists (January 2015) was also conducted and reviewed. Although most special-interest plant and animal species identified through the literature search lack adequate habitat on site for survival, all are mentioned and discussed appropriately in Appendices B and C. In addition, the following available document was reviewed to enhance LSA's understanding of special-interest plant and animal species and general resource issues of the project site: *General Biological Resources Assessor Parcel Nos. 3204-011-023, -033 and -034 on 20.26 Acres* prepared for Trans West Housing, prepared by M.J. Klinefelter, February 2007. Other sensitive species known by LSA biologists to occur in the general area were also considered.



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 Project Boundary



0 1000 2000
FEET

SOURCE: USGS 7.5' Quad - Lancaster West (1974), CA

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FIGURE 1

40-acre Residential Lancaster Project
Project Vicinity and Location

General Biological Survey

The general field reconnaissance-level surveys were conducted on January 20 and 21, 2015, by LSA Associate/Biologist Leo Simone. The surveys were conducted from between 12:30 p.m. and 5:00 p.m. on January 20, 2015, and from 7:00 a.m. to 1:30 p.m. on January 21, 2015. Weather conditions during the surveys were mild, with overcast skies on January 20 and clear skies on January 21. During the January 20 survey, winds were between 2 and 4 miles per hour (mph), with temperatures ranging from 45 to 57 degrees Fahrenheit (°F). On January 21, winds were between 5 and 10 mph, with temperatures between 28°F and 49°F.

The entire project site was surveyed on foot by walking roughly parallel belt transects spaced 60–100 ft apart. Information was recorded on the observed vegetation communities and animals on site. The project site was searched for sensitive plant communities and evidence of special-status species or habitats that could support such species. Notes were taken on general site conditions and existence or absence of potential jurisdictional waters of the State. All plant and animal species observed or otherwise detected during these field surveys were recorded. A list of all plants and animals observed is provided in Appendix A. Appendix B summarizes the special-interest plant and animal species potentially present on the proposed project site. Figure 2 shows vegetation types and photo locations within the project boundary. Figure 3 shows CNDDDB occurrences within 5 miles of the project. Photographs of current site conditions are portrayed in Figure 4.

RESULTS AND DISCUSSION

Existing Site Conditions


The proposed project site, located in the southern Antelope Valley at the southwestern end of the Mojave Desert, is characterized by relatively flat gradients of the valley floor and composed of friable, sandy soils primarily consisting of decomposed granite. Generally, the northern portion of the site is in poorer condition as a result of past agricultural uses. The southern portion of the site, consisting of a mixture of nonnative grasses and herbs, disturbed saltbush scrub, and Joshua trees, is slightly less disturbed than the northern half of the project site, which consists almost entirely of nonnative ruderal grasses and herbs. Nearly the entire site is degraded resulting from off-road vehicle use and debris dumping.

Topography and Soils

The San Andreas Fault Zone marks the southwestern margin of the Mojave Desert, and also marks the north margin of the San Gabriel Mountains and the central portion of the east-trending Transverse Ranges Geologic Province. The project site consists of undeveloped land located on the floor of the Antelope Valley, a broad, flat V-shaped basin in the Western Mojave Desert. The valley is bounded in the north by the Tehachapi Mountains and in the south by the San Gabriel Mountains and extends eastward toward the Mohave River Valley.




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0 100 200
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SOURCE: LARIAC (2013)
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 Project Boundary

Vegetation Type

 Annual Grassland/Herb

 Joshua Tree Saltbush Scrub

 Saltbush Scrub


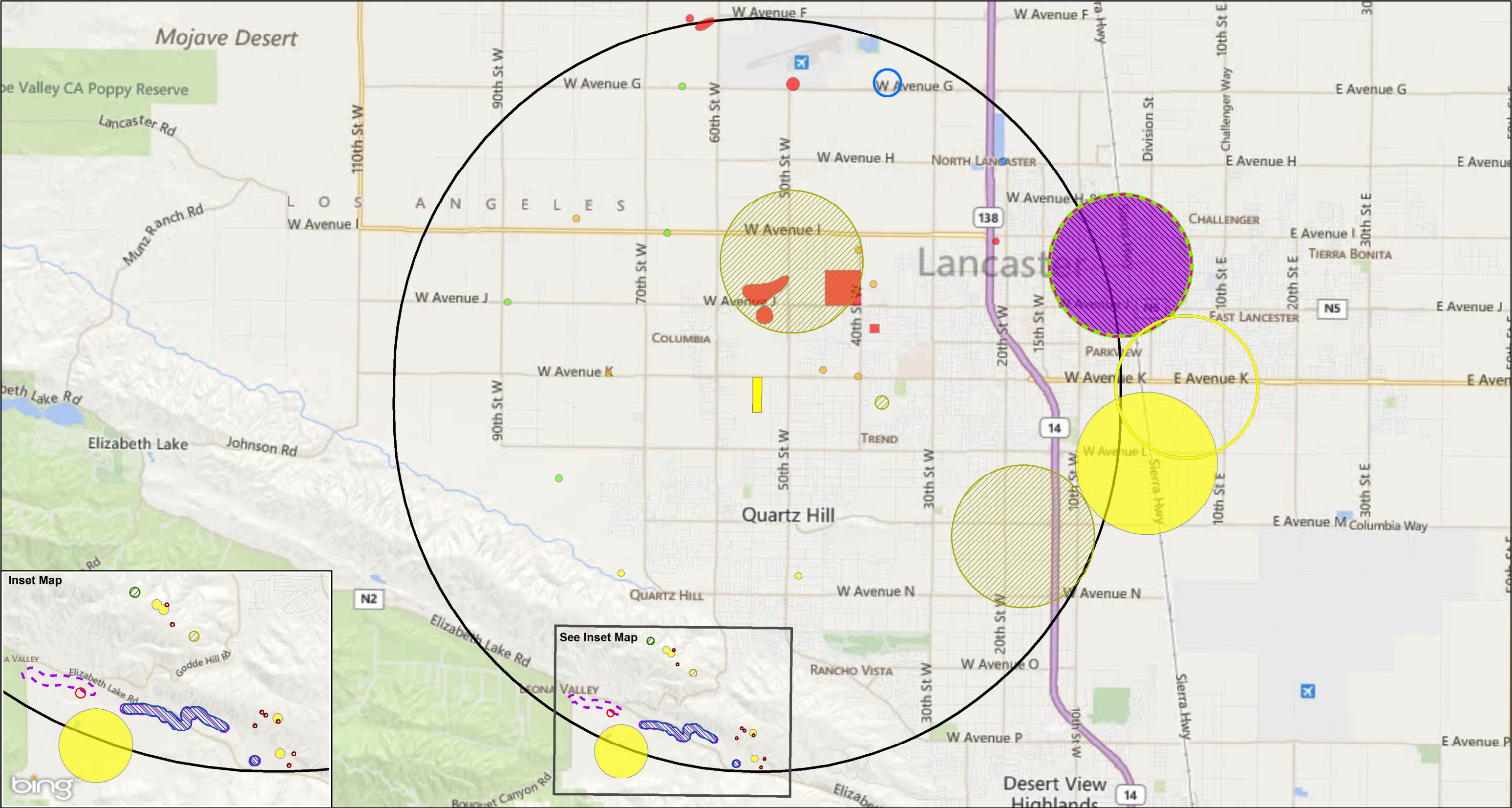
 Photo Location

FIGURE 2

40-acre Residential Lancaster Project
Vegetation & Photo Location Map



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Project Boundary	Mohave ground squirrel	alkali mariposa-lily	pale-yellow layia	western pond turtle
5 Mile Buffer of Project Boundary	Parry's spineflower	burrowing owl	short-joint beavertail	white pygmy-poppy
CNDDDB Data (10/2014)	Rosamond eriastrum	coast horned lizard	silvery legless lizard	
California red-legged frog	Southern Cottonwood Willow Riparian Forest	ferruginous hawk	slender mariposa-lily	
Lancaster milk-vetch	Swainson's hawk	least Bell's vireo	two-striped garter snake	

SOURCE: Bing Maps (2013); CNDDDB (10/2014); Meridian Land Development (2015)

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40-acre Residential Lancaster Project
CNDDDB Occurrences within 5 miles of Project

FIGURE 3

Figure 4: Site Photographs
(Page 1 of 2)



Photo 1: View looking southwest from northern site boundary at annual grass/herbs series occupying northern portion of the site.



Photo 2: View looking southwest from transition of annual grass/herbs series to disturbed saltbush series occupying southern portion of the site.

Figure 4: Site Photographs
(Page 2 of 2)



Photo 3: View looking south at Joshua tree series occupying southern portion of the site.



Photo 4: View looking at one of two fossorial mammal burrows found on site of a size that could potentially be used by burrowing owls; however, no owls or their sign were observed on the proposed project site during the January 2015 biological reconnaissance level surveys.

The soils found on the project site consist entirely of Adelanto soil series (Adelanto Coarse Sandy Loam, 2 to 5% slopes [AcA]; Natural Resources Conservation Service [NRCS], 2003). Although ground surface disturbance has occurred throughout much of the project site, the soil characteristics and landform types observed on site are consistent with what is documented in the soil survey. These well-drained soils are developed in granitic alluvium. These soils are most commonly used for irrigated crops and range. Historic vegetation is annual grasses and herbs, as well as desert scrub and Joshua tree woodland.

Vegetation

The three general plant habitat types that dominate the project site are best classified as annual grass/herb, saltbush scrub, and mixed Joshua tree saltbush scrub (Sawyer, et al. 1995), as shown in Figure 2. A total of 26 plant species representing 13 families were found on site during the on-site surveys. The vast majority of vegetation is composed of nonnative grasses and ruderal herbs; however, the proposed project site does contain disturbed saltbush scrub on the southern portion of the site and a small scattering of Joshua trees at the southern end of the project site. No State or federally listed plant species were observed on the proposed project site during the on-site investigation. Joshua tree woodland is considered a sensitive natural plant community, which is protected under the California Native Desert Plants Act. It should be noted that the survey was conducted during the winter; therefore, it is likely that plants that would normally sprout and flower during spring and summer were dormant and not visible during the survey. A complete list of plant species observed is attached in Appendix A.

Annual Grass/Herb (19.1 Acres). The vegetation of the northern half of the project site is best characterized as disturbed annual grass/herb by the prevalence of nonnative annual grasses and other weedy, nonnative herbaceous plant species. This vegetation is indicative of disturbed areas and is dominated by nonnative grasses and other weedy introduced species. Vegetation on approximately 19.1 ac of the site falls under this classification. Species observed on site include, but are not limited to, Mediterranean grass (*Schismus barbatus*), red brome (*Bromus madritensis*), red-stemmed filaree (*Erodium cicutarium*), Russian thistle (*Salsola tragus*), slender wild oat (*Avena barbata*), and shortpod mustard (*Hirschfeldia incanina*).

Saltbush Scrub (13.8 Acres). Disturbed saltbush scrub is primarily limited to the southern half of the project site. Most of the site has been disturbed in the past, and these areas have since transitioned into a mosaic of saltbush scrub interspersed with open areas populated by nonnative grasses and herbs. The major components of this habitat include four-wing saltbush (*Atriplex canescens*), rabbit brush (*Chrysothamnus nauseosus*), peachthorn (*Lycium cooperii*), and Mormon tea (*Ephedra nevadensis*). The ecological condition of this portion of the site is considered poor.

Mixed Joshua Tree Saltbush Scrub (6.6 Acres). The disturbed mixed Joshua tree saltbush scrub habitat found on site contains the same components of the adjacent saltbush scrub habitat but with the addition of Joshua trees scattered along the southern quarter of the proposed project site. The Joshua trees found on site are generally less mature than those found in the Joshua tree woodlands on the

adjacent properties, which suggests that the project site has been disturbed in the past. There appears to be at least 10 Joshua trees scattered along the southern portions of the project.

Wildlife

Amphibians. No amphibians are expected to occur on site due to the lack of suitable habitat such as springs, seeps, or seasonal wetlands.

Reptiles. No reptiles were observed on the project site, most likely as a result of the surveys being conducted during the winter when most reptiles are inactive. Western whiptail (*Aspidoscelis tigris*), western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard (*Uta stansburiana*), and gopher snake (*Pituophis catenifer*) are common reptiles that would be expected to occupy the site. All these species are widely distributed in the Southern California deserts.

Birds. Fifteen species of birds were observed on site (Appendix A). The following birds were observed and could potentially nest there: cactus wren (*Campylorhynchus brunneicapillus*), common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), western meadowlark (*Sturnella neglecta*), horned lark (*Eremophila alpestris*), northern mockingbird (*Mimus polyglottos*), lark sparrow (*Chondestes grammacus*), song sparrow (*Melospiza melodia*), and house finch (*Carpodacus mexicanus*).

Mammals. Eleven species of mammals were observed or detected on site. Coyote (*Canis latrans*), black-tailed jackrabbit (*Lepus californicus*), white-tailed antelope squirrel (*Ammospermophilus leucurus*), and California ground squirrel (*Spermophilus beecheyi*) were observed during the day.

American badger (*Taxidea taxus*), a California species of concern, is another mammal that could potentially occur on site. However, the site is highly disturbed and no sign of the badger was found during the surveys.

Special-Interest Species. This section discusses the status of special-interest species observed or potentially occurring on the proposed project site. Legal protection for special-interest species varies widely from comprehensive protection extended to listed threatened/endangered species to no legal status at present. The CDFW, the USFWS, local agencies, and special-interest groups such as the CNPS publish watch lists of declining species. These lists often describe the general nature and perceived severity of the decline. In addition, recently published findings and preliminary results of ongoing research provide a basis for consideration of species that are candidates for State and/or federal listing. Finally, species that are clearly not rare or threatened statewide or regionally, but whose local populations are sparse, rapidly dwindling, or otherwise unstable, may be considered to be of local interest.

Inclusion of special-interest species in this analysis is based on the following criteria:

- Direct observation of the species or its sign in the study area or immediate vicinity during surveys conducted for this study or reported in previous biological studies.
- Sighting by other qualified observers.
- Record reported by the CNDDDB published by CDFW.
- Presence or location of specific species lists provided by private groups (e.g., CNPS).
- The study area lies within known distribution of a given species and contains appropriate habitat.

The literature review, records search, and expert knowledge revealed a total of 43 special-interest species with the potential to occur within the area of the proposed project site. Appendix B lists these species with a data summary for each and a determination as to the likelihood of the species occurring on site.

Threatened and Endangered Species. Six federally/State-listed species were identified as potentially present in the project region (Appendix B). They include the following:

- California red-legged frog (*Rana draytonii*)
- Desert tortoise (*Gopherus agassizii*)
- Tricolored blackbird (*Agelaius tricolor*)
- Swainson's hawk (*Buteo swainsoni*)
- Least Bell's vireo (*Vireo bellii pusillus*)
- Mohave ground squirrel (*Spermophilus mohavensis*)

All of the federally/State-listed species noted above are considered to be absent from the proposed project site based on lack of suitable habitat or because the proposed project site is outside the known geographic range of these species.

Nonlisted Special-Interest Species. Of the 37 nonlisted special-interest species identified and discussed in Appendices B and C, 14 species are considered absent based on the lack of suitable habitat or the location being outside of the species' known geographic range; 5 bird species may occasionally use the site for foraging, but nesting habitat is not present; 16 species are considered to have a low probability of occurrence based on the lack of suitable habitat; 1 species is considered to have a moderate probability of occurrence; and 1 species is considered to have a high probability of occurrence. The species identified as having a moderate potential of occurrence is:

- Loggerhead shrike (*Lanius ludovicianus*).

The species identified as having a high potential of occurrence is:

- Burrowing owl (*Athene cunicularia*).

Potential Jurisdictional Waters

The United States Army Corps of Engineers (Corps) regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and nonwetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The Corps regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in the Corps regulations). In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

The CDFW, under Section 1602 of the California Fish and Game Code, regulates alterations to lakes, rivers, and streams (defined by the presence of a channel bed and banks, and at least an intermittent flow of water) where fish or wildlife resources may be adversely affected. The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the CWA. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of the Corps (i.e., waters of the U.S. including any wetlands). The RWQCB can also assert authority over “waters of the State” under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

There are no waters present on the project site that would require compliance with Sections 404 and 401 of the CWA or Section 1602 of the California Fish and Game Code; therefore, a formal delineation of jurisdictional waters will not be required for the proposed project site.

IMPACTS

Special-Interest Plant Communities

The vegetation within the proposed project area primarily consists of disturbed nonnative annual grasses and herbs, disturbed saltbush scrub, and disturbed mixed Joshua tree saltbush scrub plant communities. Neither annual grasses nor saltbush scrub is considered to be a sensitive natural plant community. However, Joshua tree woodland is considered a sensitive natural community and is a protected species under the California Desert Native Plants Act. It should be noted that the Joshua trees growing on site are sparsely spaced and would not be considered Joshua tree woodland.

Threatened and Endangered Species

All six federally/State-listed species identified in the literature review as potentially occurring in the project vicinity are considered to be absent from the proposed project site based on lack of suitable habitat or because the proposed project site is outside the known geographic range of these species.

The California red-legged frog is found in aquatic areas such as quiet pools or ponds, streams, and marshes; due to the lack of suitable habitat on or near vicinity of the project, this species would not be expected to occur on the project site. Suitable habitat is not present for either the desert tortoise or Mohave ground squirrel. Despite extensive protocol surveys conducted in the Palmdale/Lancaster

area, there are no records of either of these species in this area. It is very likely that the species are extirpated from this portion of their historic range. Due to the lack of suitable habitat, it is very unlikely that the least Bell's vireo or tricolored blackbird would be present on the site except as an occasional migrant. Swainson's hawk is known to occur in the Antelope Valley; however, suitable nesting and foraging habitat is not present on the proposed project site. The species may occasionally pass over the site during migration.

Due to a lack of suitable habitat for the California red-legged frog, desert tortoise, Mohave ground squirrel, least Bell's vireo, tricolored blackbird, or Swainson's hawk, there will be no related impacts for any of these species.

Nonlisted Special-Interest Species

Of the 37 nonlisted special-interest species identified in Appendix B, two were identified as having a moderate or high rating for probability of occurrence on the proposed project site, which merits consideration under the California Environmental Quality Act (CEQA). These species have limited population distribution in Southern California and development is further reducing their ranges and numbers. Most of these species have no official State or federal protection status, but impacts should be avoided where practicable. Twenty-one of the nonlisted special-interest species identified in Appendix B are migratory birds and/or birds of prey that are protected under the Migratory Bird Treaty Act (MBTA) and Sections 3503, 3503.5, and/or 3800 of the California Fish and Game Code. Mitigation to reduce potential impacts to these bird species to less than significant is discussed in the Mitigation Recommendations section of this report.

None of the 37 nonlisted special-interest species identified in Appendix B was observed on site during the January 2015 biological reconnaissance-level surveys. The loggerhead shrike has a moderate potential to occur on the project site.

Burrowing owl, designated as a California Sensitive Animal, has a high potential to occur. During the January 2015 biological reconnaissance-level surveys, two fossorial mammal burrows were found on site were of a size that could potentially be used by burrowing owls; however, neither owls nor their sign were observed on the proposed project site. Additionally, in 2007, the remains of a burrowing owl were found on the eastern border of the site during biological resources assessment conducted on the southern half of the site by M.J. Klinefelter. The burrowing owl is protected under the MBTA and Sections 3503, 3503.5, and 3800 of the California Fish and Game Code, which state that it is unlawful to take, possess, or destroy any bird of prey or the nests or eggs of any bird species (except as otherwise provided in the California Fish and Game Code and regulations). Disturbance of any active bird nest during the breeding season, including any active owl burrow, would be prohibited by the California Fish and Game Code. Mitigation for reducing unavoidable impacts to the burrowing owl to a less than significant level is discussed in the Mitigation Recommendations section of this report.

Habitat Fragmentation and Wildlife Movement

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when an action results in a single, unified habitat area being divided

into two or more areas, such that the division isolates the areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another. An example is the fragmentation of habitats within and around “checkerboard” residential development. Habitat fragmentation can also occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning.

The proposed project site is located adjacent to the western edge of the developed portions of the City of Lancaster. The land south of West Avenue K-8 consists of Joshua tree and juniper woodland. The land north of the site consists of Joshua tree woodland, desert scrub, and grasslands, and land to the west consists of Joshua tree and juniper woodland. The developed portion of the city is a significant barrier to wildlife movement from the Porter Hills and San Gabriel Mountains to the south to the Antelope Valley to the north. Due to existing wildlife movement barriers associated with existing land uses in the area, the proposed project is not anticipated to have significant impacts related to additional habitat fragmentation or regional wildlife movement.

Jurisdictional Waters

The remains of a irrigation storage pond are located on site; however, there are no natural drainage courses on site that would be subject to the jurisdictional authority of either CDFW per Section 1602 of the Fish and Game Code or the Sections 404 or 401 of the CWA; therefore, a formal delineation of jurisdictional waters will not be required for the proposed project site.

Water quality control regulations that may apply to the project include a Storm Water Pollution Prevention Plan (SWPPP).

Local Plans, Policies, and Ordinances

Measures for the protection and preservation of important biological resources in the Antelope Valley and Lancaster study area are addressed in the City of Lancaster General Plan 2030. Policies identified in the General Plan 2030 also function as the mitigation measures the city uses to manage growth and change within the city and are an integral part of the mitigation monitoring program required under CEQA. Preservation and protection of Joshua tree woodlands that support endangered or sensitive species and other natural areas of regional significance are addressed in the General Plan. As previously noted, individual Joshua trees are scattered within the southern portion of the site and, in LSA’s professional opinion, due to the isolation and spacing of the individual Joshua trees, they are not considered Joshua tree woodland.

The proposed project site is within the boundaries of the West Mojave Plan (United States Department of the Interior, Bureau of Land Management [BLM] 2005) but not within any conservation areas. The West Mojave Plan is a regional habitat conservation plan amendment that (1) presents a comprehensive strategy to conserve and protect the desert tortoise, the Mohave ground squirrel, and nearly 100 other sensitive plants and animals and the natural communities of which they are a part; and (2) provides a streamlined program for complying with the requirements of the California and Federal Endangered Species Acts (CESA and FESA, respectively). On January 9, 2006, the USFWS finalized its Biological Opinion for the Federal (BLM) portion of the West Mojave

Plan, and on March 13, 2006, the BLM signed the Record of Decision for the Final Version of the West Mojave Plan. An amended Biological Opinion to the West Mojave Plan from the USFWS was signed in December 2007. In September of 2009, the Court issued a summary judgment remanding the route designations made in the West Mojave Plan, but keeping other parts of the plan, primarily related to the conservation of species, in place. A remedy order based on this judgment was issued in January 2011 and identified the West Mojave route network, with few changes, that would be in place until the remedy order is satisfied. Nevertheless, the approved plan is the appropriate document for considering effects under CEQA.

Cumulative Effects

The proposed project site being considered for development is poor-quality habitat due to the effects of past agricultural operations, off-road vehicle use, and illegal refuge dumping. This portion of the Antelope Valley supports a relatively low diversity of native desert animals. Therefore, with incorporation of the recommendations listed below, implementation of the proposed project is unlikely to result in significant additional impacts to the dispersal and consequent survival of native plant and animal species in the area.

MITIGATION RECOMMENDATIONS

It is recommended that the following mitigation measures be implemented to minimize impacts to sensitive biological resources.

Burrowing Owl

At least two fossorial mammal burrows of an adequate size to support burrowing owls were observed on site during the January 2015 biological reconnaissance-level surveys. Additionally, the remains of a burrowing owl were found on the eastern border of the site during the 2007 biological resources assessment conducted on the project by M.J. Klinefelter. Burrowing owls are known to occur throughout the Antelope Valley, with at least seven previously reported burrowing owl occurrences within a 5-mile radius of the project site (as shown in Figure 3).

The following recommended mitigation measures to minimize potential impacts to burrowing owls and their burrows and foraging habitat are based on the *CDFG 2012 Staff Report on Burrowing Owl Mitigation*. Under CEQA, goals would consist of measures that would avoid, minimize, and mitigate impacts to a less than significant level. For individual projects, mitigation must be roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a) (4) (B) 15064, 15065, and 16355). Impacts to this species may be significant under CEQA; therefore, these mitigation measures should be incorporated into the CEQA document as enforceable conditions in order to reduce impacts to less than significant levels.

A burrowing owl breeding season survey should be conducted during the breeding season in accordance with the *CDFG 2012 Staff Report on Burrowing Owl Mitigation*. The protocol requires that four site visits be conducted during the breeding season: one between February 15 and April 15, followed by three survey visits, at least 3 weeks apart, between April 15 and July 15, with at least one

of these after June 15. Surveys are conducted by walking transects spaced up to 20 meters (m) (65 ft) apart throughout the survey area, which includes the project site plus adjacent habit within 150 m (500 ft) where access is permitted. Surveys are conducted between morning civil twilight and 10:00 a.m. or between 2 hours before sunset and evening civil twilight. All burrowing owl sightings, occupied burrows, and potentially suitable burrows should be mapped. The following guidelines should be used in the event that burrowing owls are present on site.

1. Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFW verifies through noninvasive methods that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. To offset the loss of foraging and burrow habitat on the project site, a minimum of 6.5 acres of foraging habitat, calculated on a 100 m (approximately 300 ft) foraging radius around the natal burrow, should be maintained per pair (or unpaired resident single bird), and permanently protected. The protected lands should be adjacent to occupied burrowing owl habitat.
2. When destruction of occupied burrows is unavoidable, burrows should be enhanced (enlarged or cleared of debris) or created (by installing artificial burrows) in a ratio of 2:1 in adjacent suitable habitat that is contiguous with the foraging habitat of the affected owls.
3. If owls must be moved away from the disturbance area, passive relocation is preferable to trapping. A time period of at least 1 week is recommended to allow the owls to move and acclimate to alternate burrows.
4. Develop a monitoring program as required in Assembly Bill 3180. A monitoring plan should include mitigation success criteria, and an annual report should be submitted to CDFW.

If avoidance is the preferred method, no disturbance should occur within approximately 160 ft of occupied burrows during the nonbreeding season of September 1 through January 31, or within approximately 250 ft during the breeding season of February 1 through August 31. Avoidance also requires that a minimum of 6.5 acres of foraging habitat be permanently preserved contiguous with occupied burrow sites for each pair of breeding burrowing owls (with or without dependent young) or single, unpaired resident bird.

Additionally, based on minimum management requirements identified in the West Mojave Plan, which is supported by the City of Lancaster, the following six steps should be implemented to minimize additional declines and to address specific problems that are likely to exist locally. These are (1) limit vehicle speeds on secondary and back roads in areas of occupied and potential burrowing owl habitat; (2) prohibit off-road vehicles in areas of occupied and potential burrowing owl habitat; (3) prohibit use of biocides or other toxins as well as shooting or trapping for pest control in occupied and potential burrowing owl habitat; (4) educate recreational users in the area as to the penalties for killing or harassing burrowing owls, and the benefits of their presence (e.g., pest control, public enjoyment, and education); (5) require surveys for this species in all areas of potential habitat prior to undergoing any planned change (e.g., road or other construction, changing land use such as grazing or vehicle access); and (6) maintain an ongoing database of sensitive species information for the West Mojave Plan, made available upon request by researchers.

The City of Lancaster should provide available information regarding any sensitive species found on the proposed project site to the appropriate entities charged with implementing the West Mojave Plan.

Joshua Trees

California Food and Agricultural Code, Division 23 of the California Desert Native Plants Act requires a permit from the County of Los Angeles Land Development Coordinating Center for the removal of Joshua trees and other native vegetation occurring in the deserts of California. LSA recommends the following:

1. Conduct Joshua tree inventory documenting size and health of all Joshua trees located on site.
2. Coordinate with the Los Angeles County Department of Regional Planning Land Development Coordinating Center to determine if mitigation will be required for impacts to on-site Joshua trees.

Raptors and Migratory Birds

To avoid potential impacts to raptors and other nesting birds, it is recommended that clearance of vegetation be conducted outside the general bird nesting season (February 1 through August 31). If vegetation removal is to occur during the avian nesting period it is recommended that a qualified biologist conduct nesting bird surveys prior to vegetation removal to ensure compliance with the MBTA. If construction occurs between February 1 and August 31, LSA recommends that a preconstruction nesting bird survey be conducted within 3 days of the start of any vegetation clearing on the project site by a qualified biologist to determine the presence or absence of active nests within or adjacent to the project site in order to avoid disrupting the nesting of migratory birds. If active bird nests are identified, construction should not be permitted to occur within 500 ft for special-status raptors, 300 ft for other avian special-status species, and up to 200 ft for other avian species protected under the MBTA until the young have fledged or the nest has failed.

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APPENDIX A

LIST OF PLANT AND ANIMAL SPECIES OBSERVED

VASCULAR PLANT SPECIES OBSERVED

The following vascular plant species were observed in the study area by LSA biologists (see methods section for names) during site surveys conducted in January 2015.

ANGIOSPERMAE: DICOTYLEDONAE

Apiaceae

Daucus pusillus

Asteraceae

Chrysanthamnus nauseosus

Ericameria linearifolia

Ericameria nauseosa

Malacothrix glabrata

Stephanomeria pauciflora

Boraginaceae

Amsinckia tessellata

Brassicaceae

* *Hirschfeldia incana*

* *Sisymbrium altissimum*

Chenopodiaceae

Atriplex canescens var. *canescens*

* *Salsola australis*

* *Salsola tragus*

Ephedraceae

Ephedra nevadensis

Euphorbiaceae

Chamaesyce albomarginata

Croton setigerus

Geraniaceae

* *Erodium cicutarium*

DICOT FLOWERING PLANTS

Carrot Family

Rattlesnake weed

Sunflower Family

Common rabbit brush

Interior goldenbush

Common rabbit brush

Desert dandelion

Desert straw

Borage Family

Bristly fiddleneck

Mustard Family

Shortpod mustard

Tumble mustard

Goosefoot Family

Fourwing saltbush

Tumble weed

Russian-thistle

Ephedra Family

Mormon tea

Spurge Family

Rattlesnake spurge

Doveweed

Geranium Family

Red-stemmed filaree

Lamiaceae

Trichostema lanceolatum

Mint Family

Vinegar weed

Solanaceae

Lycium ccooperi

Nightshade Family

Peachthorn

Tamaricaceae

* *Tamarix ramosissima*

Tamarisk Family

Saltcedar

ANGIOSPERMAE: MONOCOTYLEDONAE

MONOCOT FLOWERING PLANTS

Liliaceae

Yucca brevifolia

Lily Family

Joshua tree

Poaceae

- * *Avena barbata*
- * *Bromus hordeaceus*
- * *Bromus madritensis*
- * *Bromus tectorum*
- * *Hordeum murinum* ssp. *leporinum*
- * *Schismus barbatus*

Grass Family

Slender wild oat
Soft chess
Red brome
Cheatgrass
Hare barley
Mediterranean grass

Taxonomy and nomenclature are based on the following.

Taxonomy and scientific nomenclature conform to Hickman (1993). Common names for each taxon generally conform to Roberts (1988), although Abrams (1923, 1944, 1951) and Abrams and Ferris (1960) are used, particularly when species-specific common names are not identified in Roberts (1998).

ANIMAL SPECIES OBSERVED

This is a list of the conspicuous aerial insects, bony fishes, amphibians, reptiles, birds, and mammals noted in the study area by LSA biologists. Presence may be noted if a species is seen or heard, or identified by the presence of tracks, scat, or other signs.

* Species not native to the study area

AVES

Accipitridae

Buteo jamaicensis

Falconidae

Falco sparverius

Tyrannidae

Sayornis saya

Columbidae

Zenaida macroura

Corvidae

Corvus corax

Alaudidae

Eremophila alpestris

Troglodytidae

Campylorhynchus brunneicapillus

Turdidae

Sialia currucoides

Mimidae

Mimus polyglottos

BIRDS

Hawks, Kites, Eagles, and Allies

Red-tailed hawk

Caracaras and Falcons

American kestrel

Tyrant Flycatchers

Say's phoebe

Pigeons and Doves

Mourning dove

Crows and Jays

Common raven

Larks

Horned lark

Wrens

Cactus wren

Thrushes

Mountain bluebird

Mockingbirds and Thrashers

Northern mockingbird

Emberizidae

Melospiza melodia
Chondestes grammacus
Passerculus sandwichensis
Zonotrichia leucophrys

Icteridae

Sturnella neglecta

Fringillidae

Carpodacus mexicanus

MAMMALIA

Leporidae

Lepus californicus

Sciuridae

Spermophilus beecheyi
Ammospermophilus leucurus

Geomyidae

Thomomys bottae

Heteromyidae

Chaetodipus californicus
Dipodomys agilis
Dipodomys panamintinus
Perognathus longimembris

Muridae

Peromyscus maniculatus
Neotoma lepida

Canidae

Canis latrans

Emberizids

Song sparrow
Lark sparrow
Savannah sparrow
White-crowned sparrow

Blackbirds

Western meadowlark

**Fringilline and Cardueline Finches and
Allies**

House finch

MAMMALS

Rabbits and Hares

Black-tailed jackrabbit

Squirrels, Chipmunks, and Marmots

California ground squirrel
White-tailed antelope squirrel

Pocket Gophers

Botta's pocket gopher

Pocket Mice and Kangaroo Rats

California pocket mouse
Pacific kangaroo rat
Panamint kangaroo rat
Little pocket mouse

Mice, Rats, and Voles

Deer mouse
Desert woodrat

Foxes, Wolves, and Allies

Coyote

Taxonomy and nomenclature are based on the following.

Damselflies and dragonflies: Manolis, T. (2003. Dragonflies and Damselflies of California. University of California Press, Berkeley).

Butterflies: North American Butterfly Association (2001. NABA checklist & English names of North American butterflies, second edition. North American Butterfly Association, Morristown, New Jersey).

Fishes: Moyle, P.B. (2002. Inland Fishes of California, second edition. University of California Press, Berkeley).

Amphibians and reptiles: Crother, B.I., et al. (2000. Scientific and Standard English names of Amphibians and Reptiles of North America north of Mexico, with comments regarding confidence in our understanding. *Herpetological Circular* 29; and 2003 update) for species taxonomy and nomenclature; Stebbins, R.C. (2003. A Field Guide to Western Reptiles and Amphibians, third edition, Houghton Mifflin, Boston) for sequence and higher order taxonomy.

Birds: American Ornithologists' Union (1998. The A.O.U. Checklist of North American Birds, seventh edition. American Ornithologists' Union, Washington D.C.; and 2000, 2002, 2003, 2004, 2005, 2006, and 2007 supplements; see <http://aou.org.whsites.net/checklist/index.php3>).

Mammals: American Society of Mammalogists (Mammals of California, <http://www.mammalsociety.org/statelists/camammals.html>, accessed November 2006) for taxonomy and most nomenclature, but several deviations from traditional common names are not followed.

APPENDIX B

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/ OCCURRENCE PERIOD	RATIONALE
PLANTS				
<i>Astragalus preussii</i> <i>var. laxiflorus</i> Lancaster milk-vetch	US: -- CA: -- CRPR: 1B	Alkaline clay flats, gravelly or sandy washes, and along draws in gullied badlands, in chenopod scrub at about 700 meters (2,300 feet) elevation. Known in California only from near Lancaster and Edwards Air Force Base in Los Angeles and Kern Counties and from one location in San Bernardino County. Also occurs in Nevada and Arizona.	"Blooms March through May (perennial herb)"	Low. Habitat quality is marginal and highly disturbed.
<i>Calochortus clavatus</i> <i>var. gracilis</i> slender mariposa lily	US: -- CA: -- CRPR: 1B	Shaded foothill canyons in areas of chaparral at 320 to 1,000 meters (1,050 to 3,300 feet) elevation. Known only from San Gabriel Mountains of Los Angeles and San Bernardino Counties.	Blooms March through June	Not Present. Site contains no suitable chaparral habitat or shady areas.
<i>Calochortus striatus</i> alkali mariposa lily	US: -- CA: -- CRPR: 1B	Seasonally moist alkaline habitats, alkaline meadows and seeps, and ephemeral washes. Periodic natural inundation is important. Prefers calcareous sandy soil, claypans, and sand dunes, especially along drainages or in halophytic areas or saltbush scrub. Usually within chaparral, chenopod scrub, and Mojavean desert scrub habitat. Occurs in Tulare, Kern, Los Angeles, and San Bernardino counties. Most occurrences are located on or in the vicinity of Edwards Air Force Base. Occurs at 224 to 5,240 ft elevation.	Blooms April through June	Not Present. Site contains no surface waters or suitable chenopod habitat. Saltbush scrub habitat is highly disturbed.
<i>Chorizanthe parryi</i> <i>var. parryi</i> Parry's spineflower	US: -- CA: -- CRPR: 1B	Sandy or rocky soils in chaparral, coastal scrub, or woodlands at 40 to 1,705 meters (100 to 5,600 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June (annual herb)	Not present. No chaparral, coastal scrub, or woodland habitat.
<i>Chorizanthe xanti</i> <i>var. leucotheca</i> white-bracted spineflower	US: -- CA: -- CRPR: 1B	Sandy to gravelly places in Mojave desert scrub, pinyon and juniper woodland, or coastal scrub at 300 to 1,200 meters (980 to 3,900 feet) elevation. Reported from Los Angeles, Riverside, and San Bernardino Counties.	Blooms April through June (annual herb)	Low. Site contains marginally suitable desert scrub habitat and sandy/gravel soils.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/OCCURRENCE PERIOD	RATIONALE
<i>Cryptantha clokeyi</i> Clokey's cryptantha	US: -- CA: -- CNPS: 1B	San Bernardino and Los Angeles Counties only, in Mojavean desert scrub at 800 to 1,280 meters (2,625 to 4,200 feet).	Blooms April (annual herb)	Not present. Outside of elevation range.
<i>Cymopterus deserticola</i> desert cymopterus	US: -- CA: -- CRPR: 1B	The entire known range occurs in the western Mojave Desert. Occurs in deep, loose, and well drained soils. Soils are fine to coarse sandy soils of alluvial fans and basins, most often in swales or low sand dune areas; occasionally occurs on sandy slopes. Occurs in Mojave creosote bush scrub, desert saltbush scrub, and Joshua tree woodland with creosote bush scrub or desert saltbush scrub understory. Occurs at 2060-3060 ft (692-933 m).	Blooms March through May (perennial herb)	Low. Site contains marginally suitable, highly disturbed Joshua tree woodland and sandy soils.
<i>Eriastrum rosamondense</i> Rosamond eriastrum	US: -- CA: -- CRPR: 1B	Known only from the Rosamond and Rogers Dry Lake areas. Occurs in Alkaline hummocks, often sandy. Occurs in chenopod scrub (openings) and vernal pools (edges). Occurs at 700 to 750 meters (2,297 to 2,461 feet) elevation.	Blooms April through July (annual herb)	Not present. Site contains no surface waters or suitable chenopod scrub.
<i>Eriophyllum mohavense</i> Barstow woolly sunflower	US: -- CA: -- CRPR: 1B	Silty or sandy areas in chenopod scrub, creosote bush scrub, and playas at 500 to 960 meters (1,600 to 3,200 feet) elevation. Historically occurred within 50 kilometers (30 miles) of the City of Barstow on the Mojave Desert. Known only from Kern, Los Angeles, and San Bernardino Counties.	Blooms (March) April through May	Not present. Suitable habitat containing creosote bushscrub and playas absent from site.
<i>Layia heterotricha</i> pale-yellow layia	US: -- CA: -- CRPR: 1B	Alkaline or clay soils in grassland or openings in coastal scrub, pinyon and juniper woodland, or cismontane woodland at 270 to 1,705 [2,675] meters (900 to 5,600 [8,800]) feet elevation. Known only from Fresno, Los Angeles, Monterey, Santa Barbara, San Benito, and Ventura Counties. Believed to be extirpated from Kings, Kern, and San Luis Obispo Counties.	Blooms March through June	Not present. Site contains unsuitable habitat.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/OCCURRENCE PERIOD	RATIONALE
<i>Loeflingia squarrosa</i> <i>var. artemisiarum</i> sagebrush loeflingia	US: -- CA: -- CRPR: 2B	Sandy dunes and flats in creosote bush scrub and sagebrush scrub at 700 to 1,615 meters (2,300 to 5,300 feet) elevation. In California, known from Inyo, Kern, Lassen, Los Angeles, Plumas, Ventura, and San Bernardino Counties. Also occurs in Nevada, Oregon, and Wyoming.	Blooms April through May (annual herb)	Low. Site contains highly disturbed scrub habitat.
<i>Opuntia basilaris</i> var. <i>brachyclada</i> short-joint beavertail	US: -- CA: -- CRPR: 1B	Sandy soil or coarse, granitic loam in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon-juniper woodland at 425 to 1,800 meters (1,400 to 5,900 feet) elevation. Known only from Los Angeles and San Bernardino Counties, along the desert (north) slopes of the San Gabriel and San Bernardino Mountains, and in the Providence Mountains. Individuals of <i>Opuntia basilaris</i> in the Santa Clarita area, which are occasionally identified as variety <i>brachyclada</i> , are more properly considered variety <i>basilaris</i> , a common variety of this species (Andrew Sanders, Herbarium Curator at University of California, Riverside, pers. comm. to Stanley Spencer, August 29, 2007; Steve Boyd, Herbarium Curator at Rancho Santa Ana Botanic Garden, pers. comm. to Stanley Spencer, August 29, 2007).	Blooms April through June; identifiable year-round (succulent shrub)	Low. Site contains suitable coarse, sandy soil but contains disturbed juniper woodland and desert scrub habitat.
AMPHIBIANS				
<i>Rana draytonii</i> California red-legged frog	US: FT CA: --	Deep, quiet pools of streams, marshes, and occasionally ponds, with dense, shrubby vegetation at edges, usually below 1,200 meters (4,000 feet). Foothills surrounding the Sacramento Valley and coastal streams from Marin County to northwestern Baja California; Believed to be extirpated between Los Angeles County and the Mexican border. Below about 1,000 feet elevation.	December through April	Not present. Site lacks necessary surface waters.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/ OCCURRENCE PERIOD	RATIONALE
REPTILES				
<i>Anniella pulchra pulchra</i> silvery legless lizard	US: -- CA: SA	Inhabits sandy or loose loamy soils under sparse vegetation, on moist soils. Recorded from Contra Costa, Fresno, Los Angeles, Merced, Riverside, San Benito, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Ventura counties. Requires sandy soils and moisture.	Nearly year round, at least in southern areas	Not present. Site lacks suitable habitat.
<i>Emys marmorata</i> western pond turtle	US: -- CA: SA	Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	Year-round with reduced activity November through March	Not present. Site lacks necessary surface waters and suitable moisture.
<i>Gopherus agassizii</i> desert tortoise	US: FT CA: ST	Historically found throughout most of the Mojave and Sonoran Deserts into Arizona, Nevada, and Utah. Believed to have been extirpated from the western and southern portions of the Antelope Valley. Found in creosote bush scrub, saltbush scrub, thornscrub (in Mexico), and Joshua tree woodland. Found in the open desert as well as in oases, riverbanks, washes, dunes, and occasionally rocky slopes.	Spring, and again in early fall in areas of summer rains, with brief periods of activity at other times	Not present. Site contains highly disturbed saltbush scrub and Joshua tree woodland.
<i>Phrynosoma blainvillii</i> coast horned lizard	US: -- CA: SA	Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,400 meters (8,000 feet) elevation.	April through July with reduced activity August through October	Low. Site contains marginal habitat and is highly disturbed.
<i>Thamnophis hammondi</i> two-striped garter snake	US: -- CA: SA	Highly aquatic. Only in or near permanent sources of water. Streams with rocky beds supporting willows or other riparian vegetation. From Monterey County to northwest Baja California.	Diurnal Year-round	Not present. Site lacks necessary surface waters.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/ OCCURRENCE PERIOD	RATIONALE
BIRDS				
<i>Elanus leucurus</i> (nesting) White-tailed kite	US: – CA: FP	Typically nests in riparian trees such as oaks, willows, and cottonwoods at low elevations. Forages in open country. Found in South America and in southern areas and along the western coast of North America.	Year-round	No nesting habitat on site. May occasionally forage over site.
<i>Accipiter cooperii</i> Cooper's hawk	US: -- CA: SA	Forages in a wide range of habitats, but primarily in forests and woodlands. These include natural areas as well as human-created habitats such as plantations and ornamental trees in urban landscapes. Usually nests in tall trees (20 to 60 feet) in extensive forested areas (generally woodlots of 4 to 8 hectares with canopy closure of greater than 60 percent). Occasionally nests in isolated trees in more open areas.	Year-round	No nesting habitat on site. May occasionally forage over site.
<i>Agelaius tricolor</i> tricolored blackbird	US: -- CA: SE	Open country in western Oregon, California, and northwestern Baja California. Forages in grassland and cropland habitats. Nests in large groups near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, or tall herbs. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs.	Year-round	No nesting habitat on site. May occasionally forage over site.
<i>Aimophila ruficeps</i> <i>canescens</i> Southern California rufous-crowned sparrow	US: -- CA: SA	Steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	Year-round, diurnal activity	No nesting habitat on site. May occasionally forage over site.
<i>Aquila chrysaetos</i> golden eagle	US: -- CA: FP	Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California.	Year-round diurnal	Low. Site contains marginal habitat but has forage potential.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/ OCCURRENCE PERIOD	RATIONALE
<i>Asio flammeus</i> short-eared owl (Nesting)	US: -- CA: SA	Open country, usually with tall grass, in scattered regions around the Northern Hemisphere. Primarily a rare winter visitor in southwestern California, but recorded at Mystic Lake in the San Jacinto Valley, Riverside County, in summer 1992, and Harper Dry Lake, San Bernardino County, summer 1993.	Fall and Winter	No nesting habitat on site. May occasionally forage over site during winter.
<i>Athene cunicularia</i> burrowing owl	US: -- CA: SA	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, and margins of highways, golf courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles. They avoid thick, tall vegetation, brush, and trees, but may occur in areas where brush or tree cover is less than 30 percent.	Year-round	High. Site contains suitable habitat and is known in the area.
<i>Buteo swainsoni</i> Swainson's hawk	US: -- CA: ST	Open desert, grassland, or cropland containing scattered, large trees or small groves. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. Breeds and nests in western North America; winters in South America. Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley. In Southern California, now mostly limited to spring and fall transient. Formerly abundant in California with wider breeding range.	Nests in Antelope Valley spring and fall (in migration)	Low. Site contains open habitat with low-lying Joshua trees for nesting. Site contains previously-cultivated agricultural land.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/OCCURRENCE PERIOD	RATIONALE
<i>Calypte costae</i> Costa's Hummingbird (Nesting)	US: -- CA: SA	Found primarily in deserts, arid brushy foothills, and chaparral in the Southern California. Wanders widely.	February through September, rare in winter	Low. Site contains marginal habitat.
<i>Circus cyaneus</i> (nesting) Northern harrier	US: -- CA: SA	Marshy habitats, grassland and other open country; uncommon in open desert and brushlands. Nests on the ground in open (treeless) wetland and upland areas, including cultivated cropland and dry grassland. Nest usually constructed in tall, dense clumps of vegetation. Found in the Temperate Zone worldwide.	Year-round	No nesting habitat on site. May occasionally forage over site.
<i>Charadrius montanus</i> mountain plover	US: -- CA: SA	Forages in areas with flat topography and bare ground or short vegetation: short grasslands, freshly plowed fields, newly sprouting grain fields, grazed areas, and sometimes sod farms. Found on short grasslands and plowed fields of the Central Valley from Sutter and Yuba Counties southward. Also found in foothill valleys west of San Joaquin Valley, Imperial Valley, plowed fields of Los Angeles and western San Bernardino Counties, and along the central Colorado River Valley. Recent extralimital records exist for locations along the northern coast of California. Winters below 1,000 meters (3,200 feet).	Winters (September through March) in California	Low. Marginal habitat on site
<i>Haliaeetus leucocephalus</i> bald eagle	US: -- CA: -- FP	Winters locally at deep lakes and reservoirs feeding on fish and waterfowl. Locally rare throughout North America.	November through February	Not present. Site contains no surface waters and contains unsuitable habitat.
<i>Lanius ludovicianus</i> loggerhead shrike	US: -- CA: SA	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Inhabits open country with short vegetation, pastures, old orchards, cemeteries, golf courses, riparian areas, and open woodlands. Highest density occurs in open-canopied valley foothill	Year-round	Moderate. Site contains suitable habitat.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/ OCCURRENCE PERIOD	RATIONALE
		hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua tree habitats. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Found in open country in much of North America.		
<i>Asio otus</i> long-eared owl	US: -- CA: SA	Scarce and local in forests and woodlands throughout much of the Northern Hemisphere. Sensitive to human disturbance on nesting grounds.	Year round, more widespread in winter	Not present. Site contains unsuitable and highly disturbed habitat.
<i>Falco peregrinus</i> peregrine falcon	US: -- CA: FP	Widespread, but scarce and local throughout North America. Nests on cliffs, buildings and bridges.	Year round	No nesting habitat on site. May occasionally forage over site.
<i>Eremophila alpestris</i> California horned lark	US: -- CA: SA	Open grasslands and fields, agricultural areas from northern coastal California to northwestern Baja California.	Year round	Low. Site contains marginal habitat.
<i>Chondestes grammacus</i> lark sparrow	US: -- CA: SA	Open situations with scattered bushes or trees. Breeds throughout much of western North America and winters from the southern United States to southern Mexico.	Year round	Low. Site contains marginal habitat.
<i>Poocetes gramineus affinis</i> Oregon vesper sparrow	US: -- CA: SA	Nests in lower valleys and plains in western Washington, western Oregon, and extreme northwestern California. Winters almost exclusively in low elevation grasslands in central and Southern California.	September to April	Low. Site contains marginal habitat.
<i>Xanthocephalus xanthocephalus</i> yellow-headed blackbird	US: -- CA: SA	Nests in freshwater marshes in central-western North America and disperses to open cultivated land and marshes as far as southern Mexico.	Year round, more widespread in fall and winter	Not present. Site contains no surface waters and contains unsuitable habitat.
<i>Toxostoma lecontei</i> Le Conte's thrasher	US: -- CA: CSC	Open desert scrub, often associated with cactus and sandy soils.	Year round	Low. Habitat suitability marginal. Not known from the immediate project vicinity.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/OCCURRENCE PERIOD	RATIONALE
<i>Vireo bellii pusillus</i> least Bell's vireo	US: FE CA: SE	Riparian forests and willow thickets. The most critical structural component of Least Bell's Vireo habitat in California is a dense shrub layer 2 to 10 feet (0.6–3.0 meter) above ground. Nests from central California to northern Baja California. Winters in southern Baja California.	April through September	Not present. Site lacks suitable riparian and willow thicket habitat.
MAMMALS				
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	US: -- CA: SCT	Requires caves, mines, tunnels, bridges, buildings, or other similar structures for roosting. Has also been documented using rock crevices and hollow trees for roosting. Often uses separate sites for night, day, hibernation, or maternity roosts. Ranges from southwestern Canada through the western United States to southern Mexico.	Year-round; nocturnal	Not present. Site lacks suitable roosting habitat.
<i>Onychomys torridus ramona</i> southern grasshopper mouse	US: -- CA: SA	Believed to inhabit sandy or gravelly valley floor habitats with friable soils in open and semi-open scrub, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, preferring low to moderate shrub cover. More susceptible to small- and large-scale habitat loss and fragmentation than most other rodents, due to its low fecundity, low population density, and large home range size. Arid portions of southwestern California and northwestern Baja California.	Nocturnal, active year-round	Low. Site contains marginal habitat.
<i>Taxidea taxus</i> American badger	US: -- CA: SA	Primary habitat requirements seem to be sufficient food and friable soils in relatively open uncultivated ground in grasslands, woodlands, and desert. Widely distributed in North America.	Year-round	Low. Site contains marginal habitat and is highly disturbed.
<i>Xerospermophilus mohavensis</i> Mohave ground squirrel	US: -- CA: ST	Flat to moderate terrain in sandy alluvial, gravelly, or rocky soils in major desert scrub habitats, having been observed in creosote bush scrub, desert saltbush scrub, desert sink scrub, desert greasewood scrub, shadscale scrub, Joshua tree woodland, and Mojave mixed woody scrub	Generally March to August	Not present. Site lacks suitable habitat. Site is out of range.

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

SPECIES	STATUS	GENERAL HABITAT AND RANGE DESCRIPTION	FLOWERING/ OCCURRENCE PERIOD	RATIONALE
		(typically occurring on hilly terrain and composed of a variety of shrub species) ("Mohave ground squirrel [<i>Spermophilus mohavensis</i>]." West Mojave Plan species account by D. Laabs, 1998.). Occurs in the western Mojave Desert, with an historical range from the area of Palmdale, Victorville, and Lucerne Valley in the south to Fort Irwin and Owens Lake in the north. No known from west of Palmdale, Lancaster, and Mojave. Believed to have recently been nearly extirpated from the southern portion of its range around Palmdale and Lancaster south of Edwards Air Force Base, and in the Victorville and Lucerne Valley areas (Federal Register 75:22063-22069 [April 27, 2010]). Commonly found in association with the white-tailed antelope squirrel, a sympatric species.		

SPECIAL-INTEREST PLANT AND ANIMAL SPECIES SUMMARY

LEGEND

US: Federal Classifications

- FE Taxa listed as Endangered.
- FT Taxa listed as Threatened.
- FPE Taxa proposed for listing as Endangered.
- FPT Taxa proposed for listing as Threatened.
- FPD Taxa proposed for delisting.
- FC Candidate for listing as Threatened or Endangered.

CA: State Classifications

- SE Taxa State-listed as Endangered.
- ST Taxa State-listed as Threatened.
- SR Taxa State-listed as Rare.
- SCE Candidate for State-listing as Endangered.
- SCT Candidate for State-listing as Threatened.
- CFP California Fully Protected. Refers to animals protected from take under Fish and Game Code Sections 3511, 4700, 5050, and 5515.
- SP Special Plant. Refers to any other plant monitored by the Natural Diversity Data Base, regardless of its legal or protection status.

CNPS Classifications

- 1A Plants presumed extinct in California.
- 1B Plants considered by CNPS to be rare, threatened, or endangered in California and elsewhere.
- 2 Plants considered by CNPS to be rare, threatened, or endangered in California, but more common elsewhere.
- 3 Plants about which more information is needed – a CNPS review list.
- 4 Plants of limited distribution – a CNPS watch list.