BIOLOGICAL RESOURCES ASSESSMENT, GUASTI PLAZA SPECIFIC PLAN AMENDMENT, CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for

City of Ontario

Prepared by

SWCA Environmental Consultants

and

David Evans and Associates, Inc.

January 30, 2009

BIOLOGICAL RESOURCES ASSESSMENT, GUASTI PLAZA SPECIFIC PLAN AMENDMENT, CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

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SWCA Project Number: 15192

EXECUTIVE SUMMARY

Introduction: SWCA Environmental Consultants was retained by David Evans and Associates, Inc. (DEA) to complete DEA's draft biological resources assessment in support of an amendment to the Guasti Plaza Specific Plan (GPSP) to develop an approximately 22-acre housing development (project), located in the city of Ontario, San Bernardino County, California. The purpose of this assessment is to determine whether the proposed project has the potential to affect sensitive biological resources, and to explore options for mitigating those resources that will comply with the City's goals and objectives. The project is distributed over two noncontiguous areas (Areas 1 and 2) separated by a distance of approximately 0.5 mile. Area 1 of the project area is mapped within the Ontario Recovery Unit for the federally endangered Delhi sands flower-loving fly (U.S. Fish and Wildlife Service [USFWS] 1997).

Methods: DEA and SWCA biologists reviewed existing sources of information regarding occurrences of special-status species and assessed the potential for occurrence of these species within the project area and reviewed a number of relevant reports prepared for projects within and near the current project area. On October 28, 2008, DEA natural resources staff reconnoitered the project area and visually scanned lands within 150 meters (492 feet) of the project area boundary to determine whether sensitive habitats or special-status species occur there. Based on the distribution of vegetation and habitats within and near the project area, as well as known occurrences of special-status species within the general vicinity of the project area, DEA and SWCA staff assessed the potential for occurrence for special-status species there.

Results: Soils within the project area include Delhi fine sand soils (15.67 acres) in Area 1 and Tujunga loamy sand soils (6.16 acres) and Hanford coarse sandy loam soils (0.05 acre) in Area 2. Existing structures, infrastructure, roadway development, and ornamental landscape plantings characterize the developed attributes of the project area. Due to the high levels of historical development and ongoing disturbance, the project area does not contain any areas of natural habitat. Habitats identified within the project area include ruderal (5.78 acres in Area 1; 5.86 acres in Area 2), nonnative grassland (5.24 acres in Area 1), and urban or built-up (4.65 acres in Area 1; 0.35 acre in Area 2) habitats.

The eastern portion of the project area (Area 1) is situated within the Ontario Recovery Unit for the federally endangered Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). Additionally, Delhi fine sand soils mapped there are an important habitat component for the federally endangered Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). However, the presence of dense nonnative vegetation combined with a history of intensive land uses that included agriculture, have altered this portion of the project area to a degree that it no longer provides suitable habitat for the Delhi sands flower-loving fly.

A total of 45 plant taxa were identified within the project area during general botanical surveys, including 10 native species and 35 nonnative (71%) species. No special-status plant species were detected in the project area during the survey period, nor are any expected to occur there. Wildlife species observed during general surveys of the project area were limited to common reptile, bird, and mammal species. No special-status wildlife species were observed during the general wildlife survey. Special-status wildlife species that may occur within the project area include the burrowing owl and California mastiff bat. Appropriate nesting habitat for birds protected under the Migratory Bird Treaty Act and Fish and Game Codes 3503, 3503.5, and 3513 occurred over most of the project area. No wildlife corridors or wetlands or other waters of the U.S. were identified within or adjacent to the project area.

Development within the project area could potentially affect burrowing owl, either directly or indirectly, and would be considered a significant impact under CEQA. Impacts that could affect this species during project implementation include direct mortality and loss or alteration of suitable foraging and burrowing habitat in nonnative grassland and ruderal habitats within the project area. Development within the project

area could also potentially affect California mastiff bat, either directly or indirectly, and would be considered a significant impact under CEQA. Impacts that could affect this species during project implementation include direct mortality, loss or alteration of suitable foraging habitat in open nonnative grassland areas, and loss of roosting sites, including abandoned buildings and mature trees. Finally, the project area and adjacent lands provide suitable nesting habitat for nesting avian species whose nests and young are protected under the MBTA and California Fish and Game Codes. Construction activities associated with the proposed project that result in ground disturbance and/or the removal of vegetation could have both direct and indirect impacts to these sensitive resources. Any project impacts (direct or indirect) carried out during the avian nesting season (February 1 through August 31) that result in the abandonment or destruction of an active nest or the destruction of eggs or young of any protected avian species, including special-status species, would be considered a significant impact under CEQA.

Recommendations: SWCA recommends that appropriate burrowing owl habitat within the project area be surveyed for burrowing owl during the winter season, or between December 1 and January 31, to determine whether wintering burrowing owls occur there, and during the peak of the breeding season, or between April 15 and July 15, to determine whether burrowing owls nest there. Also, a preconstruction survey for burrowing owls should be conducted within 30 days of the initiation of ground-disturbing activities associated with the implementation of the project, per guidelines recommended by the California Department of Fish and Game (CDFG 1995). If burrowing owls are determined to occur within the project area during either focused or preconstruction surveys, mitigation should include acquisition and protection of off-site habitat to offset the loss of foraging and burrowing/breeding habitat on the project area. If burrowing owls are determined to occur within the project area during the preconstruction survey, mitigation measures would need to be implemented. If breeding owls are determined to occupy the project area or lands within 50 meters, a 50-meter buffer should be marked around the nesting burrow and avoided until the end of the breeding season (August 31) or until it has been determined by a qualified biologist that the adults and young have dispersed from the project area or buffer. Monitoring of the buffer by a qualified biologist would ensure that construction activities do not impact the breeding owls. If burrowing owls are discovered within the project area during the pre-construction survey outside of the nesting season, a 50-meter buffer should be marked around the occupied burrow and avoided until it has been determined by a qualified biologist that the owl has dispersed from the project area. Monitoring of the buffer by a qualified biologist would ensure that construction activities do not impact the owl prior to its dispersal from the area. Alternatively, eviction of non-breeding burrowing owls may be considered, as outlined by the CDFG (1995).

Construction within the project area may result in direct or indirect impacts to California mastiff bats. Potential measures that would mitigate direct impacts that result in mortality of immature bats include avoiding work on structures and large trees during the bat breeding season (June 1 through November 30). If this is not practical, then a preconstruction survey should be conducted by a qualified biologist prior to demolition of structures or removal of large trees where bat nursery roosts may be located. If nursery roosts that contain immature bats are discovered during the preconstruction survey, they should be protected until the young are able to fly. Loss of roosting and foraging habitat would not be considered a significant impact, as roosting and foraging habitat for this species (abandoned structures, trees, open fields, etc.) is common within the project area vicinity.

SWCA recommends that ground-disturbing and vegetation removal activities associated with construction of the project be performed outside of the breeding season for birds, or between September 1 and January 31. If these project activities cannot be implemented during this time period, the project applicant should retain a qualified biologist to perform preconstruction nest surveys to identify active nests within and adjacent to (up to 500 feet) the project area. Any active nests identified should be protected and monitored during construction.

These recommendations pertain to site conditions observed during the 2008 field season. Should more than two years lapse from the time of the original survey (October 28, 2008) until the initiation of project-related construction activities, a general biological survey should be conducted by a qualified biologist in order to update the biological conditions of the project area and assess whether any changes to conditions there would warrant additional recommendations and/or changes to the recommendations provided herein.

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1. INTRODUCTION

1.1 PURPOSE OF ASSESSMENT

SWCA Environmental Consultants was retained by David Evans and Associates, Inc. (DEA) to complete DEA's draft biological resources assessment in support of a formal Amendment to the Guasti Plaza Specific Plan (GPSP) to develop an approximately 22-acre housing development (project), located in the city of Ontario, San Bernardino County, California. The project area is contained within the GPSP area and is bounded by the Interstate 10 freeway to the north, Turner Avenue to the east, the Southern Pacific Railroad right-of-way to the south, and Archibald Avenue to the west. The proposed GPSP Amendment involves a revision to the adopted GPSP document to change the land use concept in the document to show residential uses within the proposed "Eastern Residential District," along with development standards and design guidelines for future residential uses within the Specific Plan area. The proposed Eastern Residential District would allow for the development of a maximum of 500 multi-family housing units. The development density in this District would range from 45 to 60 units per acre. Most of the housing units would consist of studio, one-bedroom, and two-bedroom units, ranging in size from 700 to 1,000 square feet. The residential structures would vary in height from three to five stories. In addition to the dwelling units, on-site amenities would include a pool, clubhouse, recreational area, and open space for use by the residents. The Amendment of the GPSP would also provide flexibility to allow up to 100 residential units to be located on approximately 9 acres on the westerly section of the GPSP area.

The purpose of this assessment is to determine whether the proposed project has the potential to affect sensitive biological resources, and to explore options for mitigating those resources that will comply with the goals and objectives of the City. The evaluation included a review of the California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) Rare Plant Inventory, and the City of Ontario General Plan, as well as other general plant and animal surveys for the surrounding area. The project area was also evaluated for the presence of areas subject to the jurisdiction of the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Game (CDFG). This biological resources assessment did not include a formal wetland delineation or focused surveys and is not intended to provide sufficient documentation for federal or state permits.

1.2 PROJECT LOCATION AND DESCRIPTION

The project is distributed over two noncontiguous areas (Areas 1 and 2) separated by a distance of approximately 0.5 mile. It is generally located in the north-central portion of the city of Ontario and immediately north of the Ontario International Airport. The project area is situated on private property at an elevation of approximately 965 feet above mean sea level (msl). It is depicted within the central section of the U.S. Geological Survey (USGS) Guasti 7.5-minute topographic quadrangle map at a coordinate location of 34.064320° N and −117.588990° W (Figure 1).

Area 1 of the project area comprises approximately 15.67 acres in the southeastern corner of the GPSP area and forms a reverse "L"-shaped parcel that is bound by Guasti Road on the north, Turner Avenue on the east, the Southern Pacific Railroad right-of-way on the south, and Guasti Lane on the west (Figure 2). A number of other secondary roadways dissect Area 1 throughout the site. Area 2 is located in the western portion of the GPSP area and comprises an approximately 6.21-acre rectangular parcel adjacent to Archibald Avenue. Area 2 is dissected vertically by East Guasti Road (Figure 2).

The project consists of the inclusion of the project area within the Eastern Residential District within the GPSP Amendment.

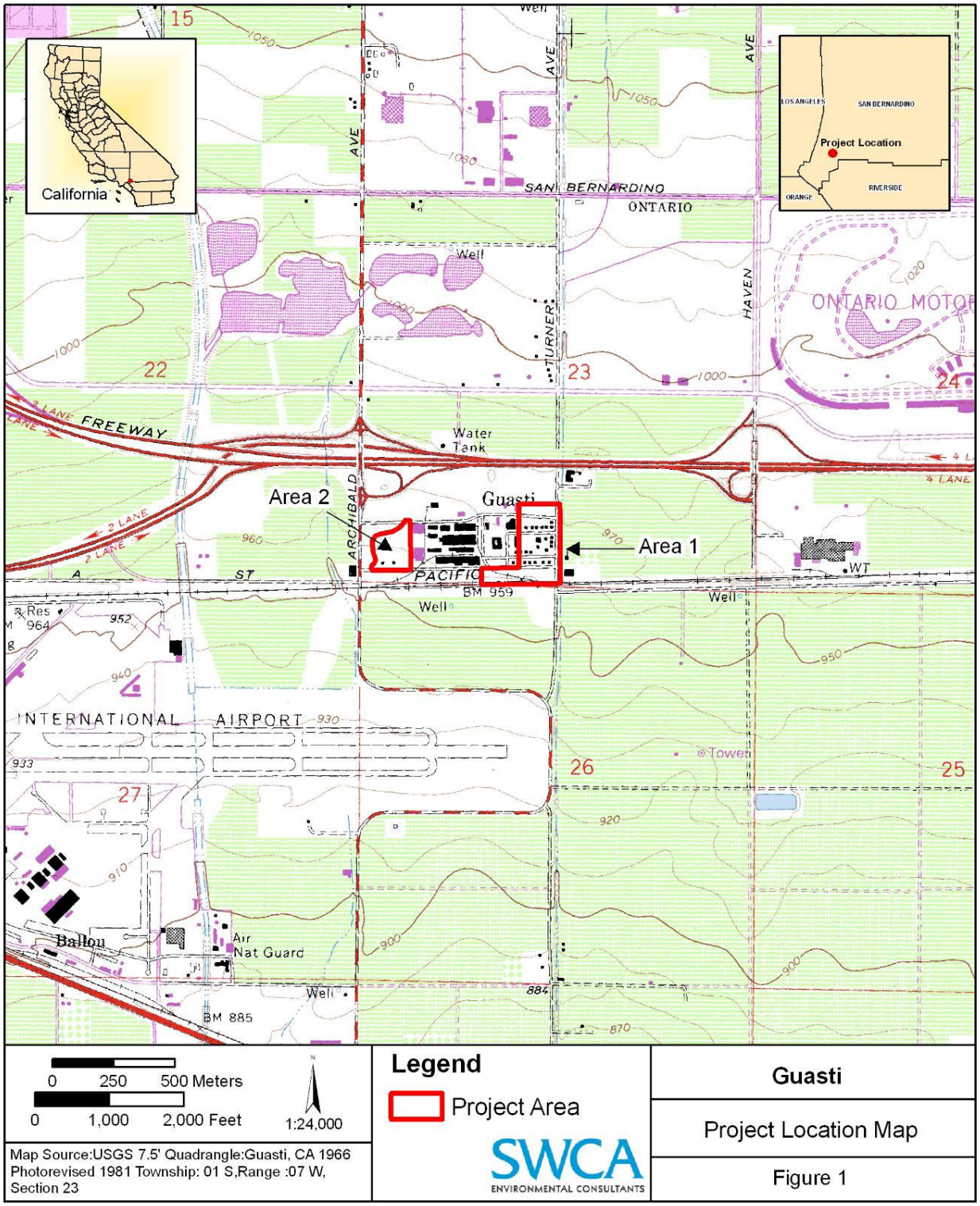

Figure 1. Project Location

Figure 2. Project Area

1.3 REGULATORY SETTING

The following describes federal, state, and local environmental laws and policies that are relevant to the California Environmental Quality Act (CEQA) review process. The CEQA significance criteria are also included within this section.

1.3.1 Federal Regulations

Section 404 of the Clean Water Act (33 Unites States Code [USC] 1344 et seq.)

Section 404 of the Clean Water Act (33 USC 1344 et seq.) prohibits discharge of dredged or fill material into "waters of the United States" without a permit from USACE. USACE and the U.S. Environmental Protection Agency administer this Act. In addition to traditional navigable waters, the definition of waters of the U.S. includes wetland areas in or adjacent to jurisdictional waters "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 Code of Federal Regulations [CFR] 328.3 7b).

Projects with impacts to waters of the U.S. may require an individual permit. Small-scale projects with minimal impacts may be authorized by nationwide permits, which have an expedited process compared with the individual permit process. Mitigation of wetland impacts is required as a condition of the Section 404 permit and may include preservation, restoration, or enhancement within the project area and/or off-site restoration or enhancement. The characteristics of restored or enhanced wetlands must be equal to or better than those characteristics of affected wetlands to achieve no net loss of wetlands values.

Federal Endangered Species Act (ESA; 16 USC 153 et seq.)

Applicants for projects that could result in adverse impacts to any federally listed species are required to mitigate potential impacts in consultation with the U.S. Fish and Wildlife Service (USFWS). Adverse impacts, defined as "take," are prohibited except under authorization through Section 7 or Section 10 consultation, and Incidental Take Authorization. During consultations, determinations are made regarding the proposed project and its potential to jeopardize the continued existence of federally listed species, and reasonable and prudent mitigation measures required to avoid such jeopardy. Mitigation is required for adverse impacts to any listed species or candidate species proposed for listing. Take, under federal definition, currently includes actions that could result in "significant habitat modification or degradation" (50 CFR Section 17.3).

Candidate species are not protected under ESA. However, the USFWS advises project applicants that candidate species could be elevated to listed status at any time, and should be regarded as species with special consideration.

Migratory Bird Treaty Act (MBTA; 16 USC 703 to 711)

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird, including feathers, parts, nests, or eggs, except in accordance with the regulations prescribed by the Secretary of Interior. The MBTA protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. These species are managed separately by each state.

Bald and Golden Eagle Protection Act (16 USC 668)

This act specifically protects bald and golden eagles from being killed or their eggs taken.

1.3.2 State Regulations

California Endangered Species Act (CESA; Fish and Game Code Section 2050 et seq.)

Species listed under the CESA cannot be taken or harmed, except under specific permit. As currently stated in the act, "take" means to hunt, pursue, catch, capture, or kill, or to attempt to do so.

Fish and Game Code Sections 3511, 4700, 5050, and 5515

These sections provide a provision for the protection of bird, mammal, reptile, amphibian, and fish species that are "fully protected." Fully protected animals may not be harmed, taken, or possessed.

Fish and Game Code Section 3503

This section states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this Code or any regulation made pursuant thereto.

Fish and Game Code Section 3503.5

This section provides protection for all birds of prey, including their eggs and nests.

Fish and Game Code Section 3513

This section makes it unlawful to take or possess any migratory non-game bird as designated in the MBTA.

Fish and Game Code Sections 1900 et seq., or Native Plant Protection Act

This section lists threatened, endangered, and rare plants so designated by the California Fish and Game Commission.

Title 14, California Code of Regulations, Sections 670.2 and 670.5

These sections list animals designated as threatened or endangered in California. The CDFG designates species considered to be indicators of regional habitat changes, or candidate species for future state listing, as California species of special concern. Species of special concern do not have special legal status, but are used by the CDFG as a management tool when considering the future use of any land parcel.

California Fish and Game Code (Sections 1601 through 1607)

These sections prohibit alteration of any lake or streambed, including intermittent and seasonal channels and many artificial channels, without execution of a Streambed Alteration Agreement through the CDFG.

This applies to any channel modifications that would be required to meet drainage, transportation or flood control objectives of the project.

California Environmental Quality Act (CEQA)

CEQA requires that a project's effects on environmental resources must be analyzed and assessed using criteria determined by the lead agency. CEQA defines a rare species in a broader sense than the definitions of threatened, endangered, or California Species of Concern. Under this definition, CDFG can request additional consideration of species not otherwise protected. CEQA significance criteria are described in detail in Section 1.3.4.

1.3.3 Local Regulations

Ontario General Plan

The Natural Resources, Aesthetic, Cultural, Open Space and Recreational Resources elements of the current General Plan for the City of Ontario (adopted 1992) do not directly address the conservation of biological resources with the City's jurisdiction. However, preservation and maintenance of parkway trees are regulated by City Municipal Code Title 10, Parks and Recreation, Chapter 2: Parkway Trees. City Ordinance 1664 (as amended by Ordinance 2249) includes requirements for maintenance, removal, and planting, and prohibitions regarding injury to parkway trees. There are no tree preservation ordinances in the City of Ontario Municipal Code.

Guasti Plaza Specific Plan

The GPSP was approved in August 1996, and a Final environmental impact report (EIR) for the GPSP and associated Zone Change was certified by the Ontario City Council at the same time (State Clearinghouse [SCH] No. 91-122-009). The GPSP does not directly address potential impacts to biological resources in the Plan area. The EIR for the Plan stated that no native plant species or communities are present in the area.

Conservation Planning

There is no Natural Community Conservation Plan (NCCP), Habitat Conservation Plan (HCP), or other regional conservation plan that covers the project area (Ontario General Plan 1992; Natural Resources Element), although designated habitat for sensitive species have been identified in other areas of the County (Biotic Resource Overlay 2000) and individual development projects in the region have established conservation areas at various locations to mitigate impacts to sensitive biological resources. There is one HCP in Ontario: the Oakmont Industrial Group HCP, in the eastern portion of the city. The Oakmont Industrial Group HCP covers approximately 10 acres at the northwest corner of Milliken Avenue and Greystone Drive, between Ontario Boulevard and State Road (SR) 60. This area has been set aside by USFWS for Delhi sands flower-loving fly habitat restoration. The site is surrounded by development to the north, east, and west, with the freeway to the south.

1.3.4 CEQA Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency will use in determining the significance of environmental effects caused by projects or

actions under its review. The City of Ontario has not adopted alternative significance thresholds for determining project impacts and, as such, relies upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based upon these guidelines, impacts to biological resources would normally be considered significant if the project:

- Has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS;
- Has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by CDFG or USFWS;
- Has a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interferes substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- Conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or, conflicts with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

An evaluation of whether an impact on biological resources would be significant must consider both the resource itself and how that resource fits into a regional or local context. Significant impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. The evaluation of impacts considers direct impacts, indirect impacts, cumulative impacts, as well as temporary and permanent impacts.

1.4 ENVIRONMENTAL SETTING

Ontario lies within the Chino Basin, connecting montane and desert areas to the north and east with the southern California coastal areas to the west. This transition of physically distinct environments creates an ecological condition commonly referred to as an “ecotone” environment. This type of environment is characterized by two or more ecosystems that overlap, creating an increased diversity of species occurrences and a unique habitat arrangement within the ecotonal area. The span of the Chino Basin ecotone affords opportunities for interior desert species to come into contact with plants and wildlife common to the coastal and mountain environments (Ontario Redevelopment Agency [ORA] 2001).

The project area is surrounded by a mixture of commercial and industrial development, along with large areas of highly disturbed or vacated agricultural lands. Geographically, the project area is generally bounded by the Interstate 10 freeway to the north, Turner Avenue to the east, the Southern Pacific Railroad right-of-way to the south, and Archibald Avenue to the west. The topography of the project area is characterized as essentially flat, with elevation changes in the range of 20 to 30 feet across the project area.

The project area consists primarily of relatively flat, highly disturbed ruderal habitat with scattered native and ornamental trees throughout. The project area has been extensively developed for agricultural purposes for the past 100+ years and contains a large number of structures of varying ages and condition. The project area contains a number of improved and unimproved internal roadways that criss-cross the

site and create large areas of compacted and unvegetated open space. Much of the remaining area is actively managed for weed abatement and vector control; several areas had been recently disked or slashed at the time of the site visit. Past grading activities have resulted in areas of soil mounding. In addition, a number of debris piles containing construction materials are also scattered throughout the site.

Area 1 of the project area is mapped within the Ontario Recovery Unit for the federally endangered Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) (USFWS 1997).

2. METHODS

2.1 LITERATURE AND DATABASE SEARCH

DEA and SWCA reviewed existing sources of information regarding occurrences of special-status species and assessed the potential for occurrence of these species within the project area. Special-status species are plants and animals in one or more of the following categories:

- Species listed or proposed for listing as threatened or endangered under the federal ESA (50 CFR 17.12 [listed plants], 50 CFR 17.11 [listed animals], and various notices in the Federal Register [FR] [proposed species]).
- Species that are candidates for possible future listing as threatened or endangered under ESA (67 FR 40657, June 13, 2002).
- Species listed or proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations [CCR] 670.5).
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines Section 15380).
- Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).
- Plants considered by the CNPS to be "rare, threatened, or endangered in California" (Lists 1B and 2 by CNPS (2008).
- Plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in CNPS 2008), which may be included as special-status species on the basis of local significance or recent biological information.
- Animal species of special-concern as listed by CDFG (2006).
- Animals fully protected in California (California Fish and Game Code Sections 3511 [birds], 4700 [mammals], 5050 [amphibians and reptiles], and 5515 [fish]).
- Animals included on the California Special Animals List (CDFG 2008) because of inclusion on one or more of several "watch lists," including the International Union for Conservation of Nature (IUCN) Red List, the American Bird Conservancy (ABC) Green List, the Audubon WatchList, the Bureau of Land Management Sensitive Species list, the California Department of Forestry and Fire Protection Sensitive Species list, the U.S. Forest Service Sensitive Species list, the USFWS Birds of Conservation Concern list, the United States Bird Conservation (USBC) Watch List, bat species included on the Western Bat Working Group's (WBWG) Regional Priority Matrix as High or Medium, and the Xerces Society Red list of pollinators.

The following sources of information were consulted:

- The CNDDB (CNDDB 2008) for the USGS Guasti 7.5-minute quadrangle and eight surrounding quadrangles in the project vicinity, including Mt. Baldy, Cucamonga Peak, Devore, Ontario,

Fontana, Prado Dam, Corona North, and Riverside West; accessed October 28, 2008, and January 13, 2009.

- CNPS 2008 online Inventory of Rare and Endangered Plants of California for the USGS Guasti 7.5-minute quadrangle and eight surrounding quadrangles in the project vicinity, including Mt. Baldy, Cucamonga Peak, Devore, Ontario, Fontana, Prado Dam, Corona North, and Riverside West; accessed October 28, 2008, and January 13, 2009.
- USFWS, Carlsbad Fish & Wildlife Office Endangered and Threatened Species List (San Bernardino County) (USFWS 2008); accessed October 28, 2008.
- Soil Survey of San Bernardino County, Southwestern Part, CA, Web Soil Survey (U.S. Resource Conservation Service [USRCS] 2008); accessed October 28, 2008.

In addition, a number of relevant reports prepared for areas within, or within proximity to the project area were also reviewed, including:

- Recirculated Draft EIR for the Guasti Redevelopment Project Area (GRC Redevelopment Consultants 2001)
- Final EIR for the Guasti Plaza Specific Plan and Zone Change (GRC Associates 2001)
- Biological Technical report for the Bates Specific Plan (Scott White Biological Consulting 2006)
- Arborist Report for the Guasti Villa Redevelopment Project (Carlberg 2007)
- Arboricultural Report for the Guasti Plaza Specific Plan EIR (Knapp Associates 2001)
- Conservation Background Report for the County of San Bernardino General Plan Update (County of San Bernardino 2006)
- Delhi Sands Flower-Loving Fly Habitat-based Evaluation for 180 acres, including the GPSP project area (Impact Sciences 1999)

2.2 FIELD SURVEYS

DEA natural resource staff walked the project area and visually scanned lands within 150 meters (492 feet) of the project area boundary. Special attention was given to the proposed project area plus a 150-foot buffer around this area to determine whether sensitive habitats or special-status species occur there. Photographs were taken to document biological resources and field conditions.

All plant species observed during the survey, including special-status species, were identified to species or further using taxonomic nomenclature provided in *The Jepson Manual of Higher Plants of California* (Hickman 1993). Vegetation communities observed during the survey were described in field notes, verified on aerial photographs, and described according to *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995) and *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986) whenever appropriate. Any potential wetland areas were also described and noted on aerials, but not formally delineated.

Wildlife species were recorded during the survey of the project area and were detected by sight and sound. Wildlife habitats were also assessed within the project area. Special attention was given to the potential for nesting bird species, including raptors, that could nest in trees within and adjacent to the project area. All species were identified to the lowest possible taxonomic level. No nocturnal or protocol surveys were conducted.

2.3 ASSESSMENT OF SPECIAL-STATUS SPECIES POTENTIAL

Following the database searches and field survey, DEA and SWCA assessed the potential for occurrence for special-status species within the project area and its immediate vicinity. This consisted of assessing the biological conditions within the project area and its immediate vicinity and the known occurrences of special-status species within the general vicinity of the project area (nine-quadrangle area). During the assessment, each species was assigned to one of the categories listed below.

Present: Species is known to occur within the project area, based on recent (within 20 years) CNDDB or other records, and/or was observed within the project area during the field survey(s).

May occur: Species is known to occur in the vicinity of the project area based on recent (within 20 years) CNDDB or other records within 5 miles and/or based on professional expertise specific to the project area or species, and there is suitable habitat within the project area. Alternatively, there is suitable habitat within the project area and the project area limits are within the known range of the species. For avian species, a distinction was made between occurrence potential on the project area as a forager, nester, and/or transient.

Not likely to occur: Species is known to occur in the vicinity of the project area (within 5 miles); however, there is poor quality or marginal habitat in the project area. If the species occurs at the project area, it would likely be as a migrant, and the species is not likely to reproduce (breed or nest) within the project area due to a lack of suitable habitat or because the project area is outside of their known breeding range.

Absent: There is no suitable habitat for the species within the project area, or the project area is located outside of the known range of the species. Alternatively, a species was surveyed for during the appropriate season with negative results for species occurrence.

3. RESULTS

3.1 FIELD SURVEY

DEA natural resource specialist Mark Saunders conducted the field visit on October 28, 2008 between 7 a.m. and 1 p.m. Conditions encountered during the survey period are described below (Table 1).

Table 1. Field Survey Conditions

Date	Time (24 h)	Temperature High/Low (°F)	Field Temperature (°F)	Sky Cover	Average Wind Speed (mph)	Rainfall (inches)	Average Humidity (%)
10/28/2008	0700–1300	97.0/62.0	81.0	Clear	3.0 (WNW)	0.0	24.0

Note: Compiled from field notes and augmented with detail from http://www.wunderground.com/history/airport/KONT/2008/10/28/DailyHistory.html?req_city=NA&req_state=NA&req_statename=NA

3.2 SOILS

The following soils are mapped as occurring within the project area (USRCS 2008) and are described in the Soil Survey of San Bernardino County–Southwestern Part (Figure 3; Table 2).

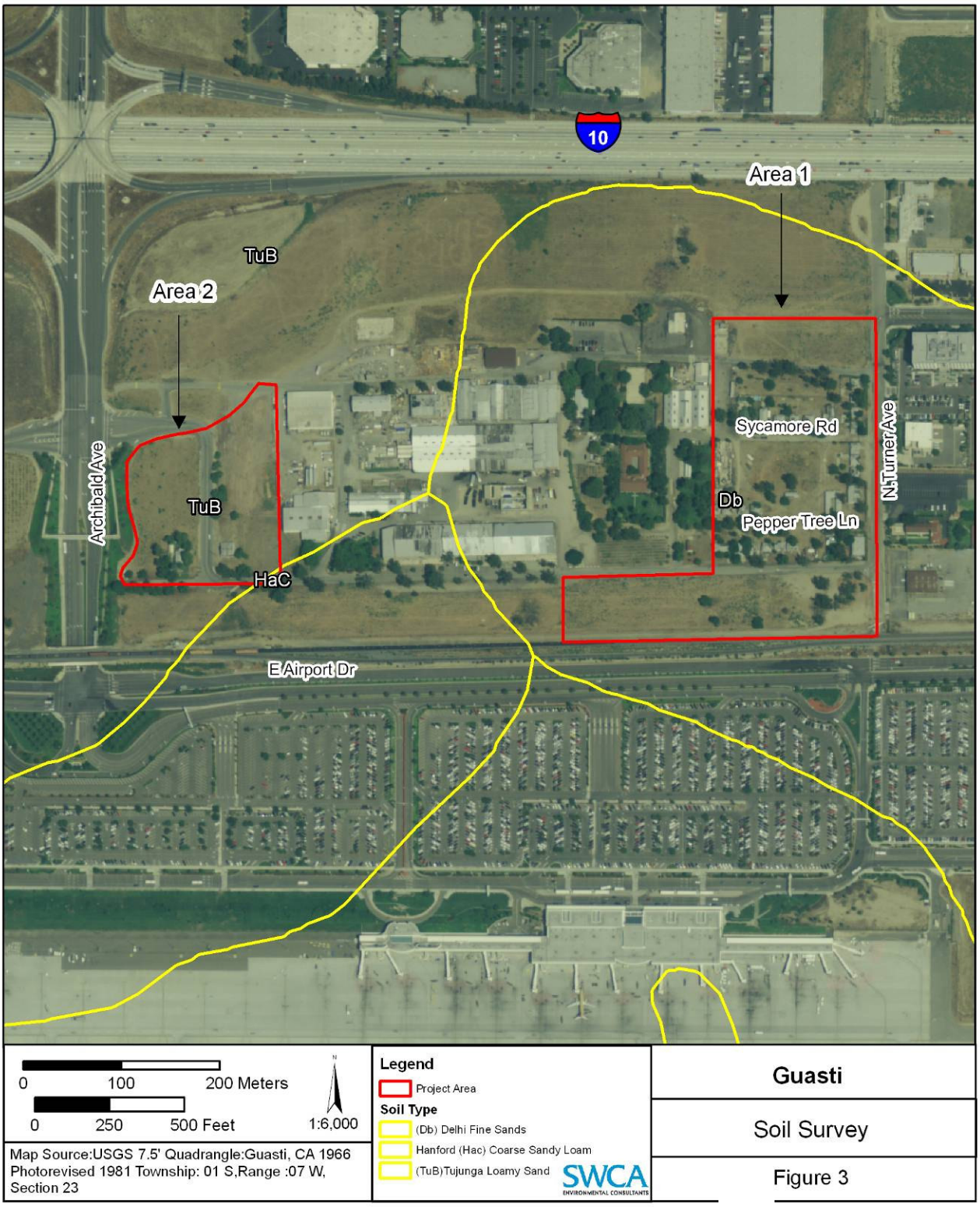

Figure 3. Soils

Table 2. Soils

Habitats	Area 1	Area 2	Total Acres
Tujunga Loamy Sand Soils	0	6.16	6.02
Delhi Fine Sand Soils	15.67	0	15.41
Hanford Coarse Sandy Loam Soils	0	0.05	0.45
Total	**15.67**	**6.21**	**21.88**

3.2.1 Tujunga Loamy Sand Soils

Tujunga loamy sand soils consist of brown loamy sand and pale brown coarse sand 60 inches deep or m. These soils are formed on alluvial fans on granitic alluvium. Tujunga loamy sand soils, 0% to 5% slopes (TuB), have very slow to slow runoff potential, and the hazard of water erosion is slight. The soils are slightly acid throughout and rapidly permeable. They exhibit a moderate to high wind erosion hazard on bare soil and will disperse if left unprotected. Tujunga soils are considered to be hydric soils when occurring in drainageways in the project area (U.S. Department of Agriculture [USDA] 1991). Delhi fine sand or loamy fine sand soils may intergrade with Tujunga series soils under certain conditions. Within the project area, these soils account most of Area 2 (6.16 acres; Figure 3).

3.2.2 Delhi Fine Sand Soils

The Delhi series soils (Db) consists of very deep, somewhat excessively drained soils. They formed from wind modified material weathered from granitic rock sources and are typically found on floodplains, alluvial fans and terraces. Typical slopes are between 0% and 15%. Delhi series soils are slightly acidic and display negligible to slow runoff potential and are rapidly permeable. Within the project area, these soils account for 100% of Area 1. They exhibit a moderate to high wind erosion hazard on bare soil and will disperse if left unprotected. Delhi fine sand soils are not typically considered to be hydric; however, they can be when occurring in depressional areas (USDA 1991). Delhi fine sand soils are an important habitat component for the federally endangered Delhi sands flower-loving fly. Within the project area, these soils account for all of Area 1 (15.67 acres; Figure 3).

3.2.3 Hanford Coarse Sandy Loam Soils

The Hanford series consists of very deep, well-drained soils that formed in moderately coarse-textured alluvium predominantly from granite. Hanford soils are on stream bottoms, floodplains, and alluvial fans and have slopes of 0% to 15%. Soil between the depths of about 8 and 24 inches usually is dry all of the time from late April or May until November or early December and usually is moist in some or all parts of this section all the rest of the year. Hanford soils are used for growing a wide range of fruits, vegetables, and general farm crops. They are also used for urban development and dairies. Vegetation in uncultivated areas is mainly annual grasses and associated herbaceous plants. These soils are widely distributed in the San Joaquin Valley and in the valleys of central and southern California. Within the project area, these soils account for a small portion of Area 2 (0.05 acre; Figure 3).

3.3 BIOTIC HABITATS

Existing structures, infrastructure, roadway development, and ornamental landscape planting characterize the developed attributes of the project area. Due to the high levels of historical development and ongoing disturbance, the project area does not contain any areas of natural habitat. Habitats identified within the project area are mapped in Figure 4 and described in detail below. Acreages of biotic habitats within the

project area are provided in Table 3, including graded areas and total acreages. Full lists of plant and wildlife species observed within biotic habitats within the project area and on adjacent lands are presented in Appendix A.

Table 3. Biotic Habitats

Habitats	Area 1	Area 2	Total Acres
Ruderal	5.78	5.86	11.64
Nonnative Grassland	5.24	0	5.24
Urban or Built-Up	4.65	0.35	5.00
Total	**15.67**	**6.21**	**21.88**

3.3.1 Ruderal Habitat

Ruderal habitat is common throughout much of California and is characteristic of areas disturbed by human activities such as agriculture, construction, or other land-clearing activities. Vegetation within ruderal habitat is dominated by highly adaptive and invasive exotic species, and typically with a depauperate native species component. Within the project area, ruderal areas characterize most of the project site (Photograph 1). Ruderal habitats on the project area are highly disturbed through historical and current land use activities. In areas where there is no existing development, the habitat is actively managed for weed abatement and vector control by an ongoing program of frequent disking. This results in a poorly structured soil profile and high proportion of nonnative weedy plant species.

Common plant species included common horseweed (*Conyza canadensis*), Coulter's horseweed (*Conyza coulteri*), common sunflower (*Helianthus annuus*), tumbling oracle (*Atriplex rosea*), lambsquarters (*Chenopodium album*), Russian thistle (*Salsola tragus*), red-stemmed filaree (*Erodium cicutarium*), and puncture vine (*tribulus terrestris*). A large number of ornamental tree plantings are also found within this habitat type on the project area. Approximately 11.64 acres of ruderal habitat is present within the project area, including 5.78 acres in Area 1, 5.86 acres in Area 2, and approximately 0.25 acre of piled debris throughout the project area. Common wildlife observed within the ruderal habitat areas include side-blotched lizard (*Uta stansburiana*), house finch (*Carpodacus mexicanus*), mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), and white-tailed antelope squirrel (*Ammospermophilus leucurus*). A full list of plant and wildlife species observed within the project area is presented in Appendix A.

Figure 4. Habitats

Photograph 1. Ruderal habitats typical of the project area.

3.3.2 Nonnative Grassland

Nonnative grassland, classified as California annual grassland by Sawyer and Keeler-Wolf (1995), consists of nonnative herbaceous species forming a dense to sparse cover of annual grasses and is often associated with numerous species of showy-flowered, native annual forbs, especially in years of favorable rainfall. Germination occurs with the onset of the late fall rains; growth, flowering, and seed-set occur from winter through spring. With a few exceptions, the plants persist in the seed bank through the summer-fall dry season. It occurs in valleys and foothills throughout much of California, except for the north coastal and desert regions. Within the project area, nonnative grassland habitat occurs within the southern section of Area 1, south of East Guasti Road along the Southern Pacific Railroad right-of-way. The nonnative grassland occurring along the railroad right-of-way is extensively managed through a maintenance slashing program.

Common plant species found within the nonnative grassland habitat area on the project area include short-podded mustard (*Hirschfeldia incana*), London rocket (*Sisymbrium irio*), tumbling oracle, cheeseweed (*Malva parviflora*), and red brome grass (*Bromus madritensis* ssp. *rubens*). A number of large trees, including the ornamental mimosa tree (*Albizzia julibrissin*), California pepper tree (*Schinus molle*), and river red gum (*Eucalyptus camaldulensis*) are also found in this vegetation community. Approximately 5.24 acres of nonnative grassland habitat is present within Area 1 of the project area, including approximately 0.5 acre of piled debris. Common wildlife observed within the ruderal habitat areas include side-blotched lizard, American crow (*Corvus brachyrhynchos*), and mourning dove. A single red-tailed hawk (*Buteo jamaicensis*) was observed perching in a large red gum overlooking this habitat area during the early morning field survey. A full list of plant and wildlife species observed within the project area is presented in Appendix A.

3.3.3 Urban or Built-up Lands

Urban or built-up lands are characterized by areas of intensive use, with much of the land covered by structures or associated facilities (Anderson et al. 1976). Included in this category are cities and

transportation, power, and communications facilities. Within the project area, these lands include the old winery buildings and residential houses, internal roadways (both sealed and unsealed), utility infrastructure, and areas cleared around such facilities as part of historical landscaping or current land development activities. The habitat value of these lands is generally poor due to the high levels of activity on the sites and the lack of substantial vegetative cover. Approximately 5 acres of urban or built-up land occurs within the project area, including 0.35 acre in Area 2 and 4.65 acres in Area 1 (Photograph 2).

Photograph 2. Urban or built-up lands (with ruderal vegetation in foreground).

3.4 SPECIES INVENTORIES

3.4.1 Plant Inventory

A total of 45 plant taxa were identified within the project area during general botanical surveys. Twenty-six plant families were represented, with 10 native species and 35 nonnative (71%) species identified. No special-status plant species were detected on the project area during the survey. A complete list of plant species recorded on the project area is presented in Appendix A.

3.4.2 Wildlife Inventory

Wildlife species observed during the survey of the project area were limited to common reptile, bird, and mammal species. The small number of observations is most likely due to the high levels of ongoing disturbance occurring in the area and the poor quality of available habitats on the project area. Species observed during the field survey included side-blotched lizard, American crow, Brewer's blackbird (*Euphagus cyanocephalus*), house finch, mourning dove, northern mockingbird (*Mimus polyglottos*), red-tailed hawk (*Buteo jamaicensis*), and white-tailed antelope squirrel. No special-status wildlife species were observed during the general wildlife survey. A complete list of wildlife species recorded on the project area is presented in Appendix A.

3.5 ASSESSMENT OF SENSITIVE BIOLOGICAL RESOURCES

A list of special-status species known to occur within the vicinity of the project area was generated from the CNDDB and the CNPS 2008 online Inventory of Rare and Endangered Plants of California. A total of 85 special-status species, including 36 plants and 49 wildlife species as well as nine sensitive habitats were identified within the nine-quadrangle area in the vicinity of the project area (Appendix B; Figure 5). Provided below is a general discussion and expanded descriptions for those species or habitats that were either present within the project area, or for those whose occurrence potential was evaluated as "may occur" within the project area.

3.5.1 Sensitive Habitats

During the field survey, the potential for sensitive and potentially jurisdictional habitats was assessed within the project area. A search of the CNDDB records for sensitive habitats was also conducted, which identified nine sensitive habitats within the nine-quadrangle area, including California walnut woodland, coastal and valley freshwater marsh, Riversidian alluvial fan sage scrub, southern California arroyo chub/Santa Ana sucker stream, southern Coast live oak riparian forest, southern cottonwood willow riparian forest, southern riparian forest, southern sycamore alder riparian woodland, and southern willow scrub. None of these habitats was present within the project area during the survey.

3.5.2 Special-status Species Habitat

Delhi Sands Flower-loving Fly

The eastern portion of the project area (Area 1) is situated within the Ontario Recovery Unit for the federally endangered Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). Though critical habitat has not been designated for this species, the recovery plan (USFWS 1997) defines three separate Recovery Units, including the Colton, Jurupa, and the Ontario Units. Each Recovery Unit includes occupied habitat containing one or more populations of the fly and/or restorable habitat for at least one population. Because the project area is included within the Ontario Recovery Unit, a consideration of habitat requirements for the fly is warranted.

An important habitat feature for the Delhi Sands flower-loving fly includes the fine sandy Delhi (fine sands) Series soils, consisting of often wholly or partly sand dunes stabilized by the sparse native vegetation of the Colton dune system. These soils cover about 40 square miles in several irregular patches extending from the city of Colton to Ontario and Chino in northwestern Riverside and southwestern San Bernardino Counties (U. S. Soil Conservation Service 1971, 1980). Another important habitat component is native vegetation. The typical native vegetation community within the Colton dunes is the Desert Sand–verbena series (Sawyer and Keeler-Wolf 1993), which includes California buckwheat (*Eriogonum fasciculatum*), California croton (*Croton californicus*), deerweed (*Lotus scoparius* var. *scoparius*), and California evening primrose (*Oenothera californica* ssp. *californica*). Female Delhi Sands flower-loving flies oviposit in the shade of shrubs, such as the telegraphweed (*Heterotheca grandiflora*). All observed nectaring events by adult flies have been restricted to flowers of the California buckwheat. Other flowers available during the flight period of adults include croton and telegraphweed, but nectaring events on these plants have not been observed (USFWS 1997). Populations are more likely to occur in relatively open, undisturbed habitats. Adults do not appear to use areas of dense vegetation, either where shrubs or annual grasses provide more than 50% cover. Invasive nonnative vegetation severely degrades or eliminates the habitat of the Delhi Sands flower-loving fly (Rogers and Mattoni 1993; USFWS 1997). However, this species has been reported in areas that have been subject to past heavy disturbance but allowed to recover to somewhat natural conditions (Impact Sciences 1999).

Though Area 1 of the project area contains Delhi series soils, the presence of dense nonnative vegetation combined with a history of intensive land uses that included agriculture, have altered this portion of the project area to a degree that it no longer provides suitable habitat for the Delhi sands flower-loving fly. Therefore, although there is one recent record of this species within five miles of the project area (CNDDB 2008; Figure 5), the occurrence potential for this species has been assessed "not likely to occur" (Appendix B).

3.5.3 Special-status Species

Special-status Plants

During the field survey, habitats capable of supporting special-status plant species were evaluated within the project area. Based on the analysis provided in Appendix B, the following species were eliminated from further consideration because (1) there is no suitable habitat within the project area and there are no local records (within 5 miles) in the vicinity of the project area and/or (2) the project area is outside of their known range. Alternatively, although there are records of these species within the project's vicinity (within 5 miles), there is no suitable habitat within the project area to support the occurrence of these species. These species were assessed as "absent":

- Chaparral sand verbena (*Abronia villosa* var. *aurita*)
- Singlewhorl burrobrush (*Ambrosia monogyra*)
- Coulter's saltbush (*Atriplex coulteri*)
- Nevin's barberry (*Berberis nevinii*)
- Slender mariposa lily (*Calochortus clavatus gracilis*)
- Plummer's mariposa lily (*Calochortus plummerae*)
- Late-flowered mariposa lily (*Calochortus weedii* var. *intermedius*)
- Parry's spineflower (*Chorizanthe parryi* var. *parryi*)
- White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*)
- California sawgrass (*Cladium californicum*)
- Peirson's spring beauty (*Claytonia lanceolata* var. *peirsonii*)
- Salt marsh bird's beak (*Cordylanthus maritimus* ssp. *maritimus*)
- Slender-horned spineflower (*Dodecahema leptoceras*)
- Many-stemmed dudleya (*Dudleya multicaulis*)
- Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*)
- Johnston's buckwheat (*Eriogonum microthecum* var. *johnstonii*)
- Mesa horkelia (*Horkelia cuneata* ssp. *puberula*)
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- Robinson's peppergrass (*Lepidium virginicum* var. *robinsonii*)
- Lemon lily (*Lilium parryi*)
- San Gabriel linanthus (*Linanthus concinnus*)
- Parish's desert-thorn (*Lycium parishii*)
- Hall's monardella (*Monardella macrantha* ssp. *hallii*)
- Pringle's monardella (*Monardella pringlei*)
- California muhly (*Muhlenbergia californica*)

- Prostrate navarretia (*Navarretia prostrate*)
- Peninsular nolina (*Nolina cismontana*)
- Woolly mountainparsley (*Oreonana vestita*)
- Rock Creek broomrape (*Orobanche valida* ssp. *valida*)
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*)
- Rayless ragwort (*Senecio aphanactis*)
- Salt Spring checkerbloom (*Sidalcea neomexicana*)
- Laguna Mountains jewel flower (*Streptanthus bernardinus*)
- San Bernardino aster (*Symphyotrichum defoliatum*)
- Greata's aster (*Symphyotrichum greatae*)

Based on the analysis provided in Appendix B, the following species were eliminated from further consideration either because (1) there are no recent local records of their occurrence in the vicinity of the project area, as determined through the CNDDB; or (2) although there are recent local records of their occurrence within the vicinity of the project area, habitat within the project area was determined to be to be marginal, limited, or otherwise unfavorable; or (3) the site does not likely provide suitable habitat for a sustaining population of this species. Thus, San Diego ambrosia (*Ambrosia pumila*) was assessed as "not likely to occur."

Because all of the plants identified in the CNDDB and CNPS Rare Plant Inventory searches were determined to either be "absent" or "not likely to occur," no special-status plant species are expected to occur within the project area.

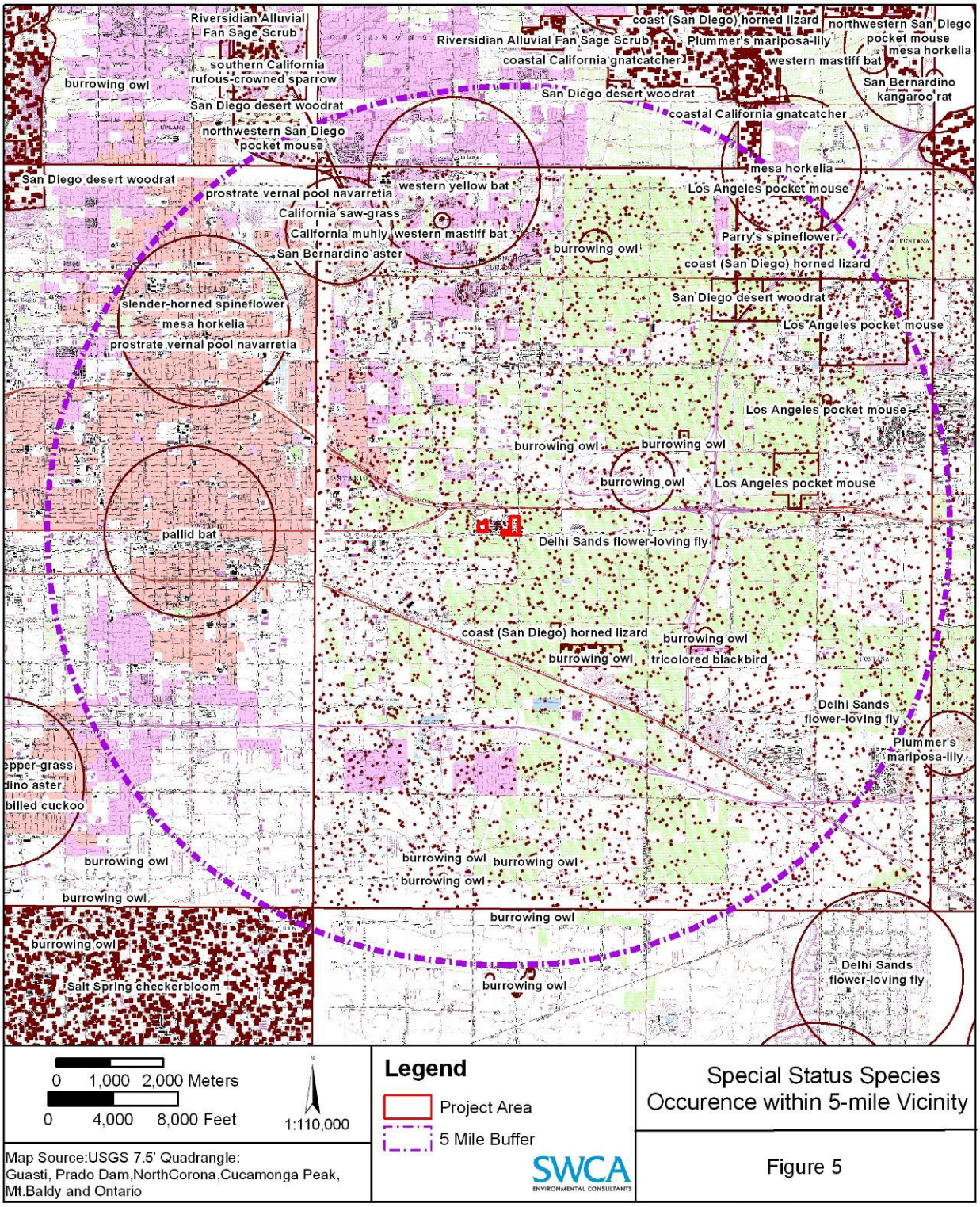

Figure 5. Special-status Species Occurrences within 5-mile Vicinity

Special-status Wildlife

During the field survey, habitats capable of supporting special-status wildlife species were evaluated within the project area. Based on the analysis provided in Appendix B, the following species were eliminated from further consideration because (1) there is no suitable habitat within the project area AND there are no local records (within 5 miles or 10 miles for butterfly, bird, and bat species) in the vicinity of the project area, and/or (2) the project area is outside of their known range. Alternatively, although there are records of these species within the project's vicinity (within 5 miles), there is no suitable habitat within the project area to support the occurrence of these species. These species were assessed as "absent":

- Greenest tiger beetle (*Cicindela tranquebarica viridissima*)
- San Gabriel Mountains elfin butterfly (*Callophrys mossii hidakupa*)
- Busck's gallmoth (*Carolella busckana*)
- California diplectronan caddisfly (*Diplectrona californica)*
- A cuckoo wasp (*Ceratochrysis longimala*)
- Arroyo chub (*Gila orcuttii*)
- Santa Ana speckled dace (*Rhinchthys osculus* ssp. 3)
- Santa Ana sucker (*Catostomus santaanae*)
- Coast range newt (*Taricha torosa torosa*)
- San Gabriel Mountains slender salamander (*Batrachoseps gabrieli*)
- Mountain yellow-legged frog (*Rana muscosa*)
- Southwestern pond turtle (*Actinemys marorata pallida*)
- San Diego banded gecko (*Coleonyx variegatus abbotti*)
- Coastal western whiptail (*Aspidoscelis tigris stejnegeri*)
- Northern red-diamond rattlesnake (*Crotalus ruber rubber*)
- Golden Eagle (*Aquila chrysaetos*)
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
- Black swift (*Cypseloides niger*)
- Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Least Bell's vireo (N) (*Vireo bellii pusillus*)
- Coastal California gnatcatcher (*Polioptila californica californica*)
- Yellow warbler (*Dendroica petechia brewsteri*)
- Yellow-breasted chat (*Icteria virens*)
- Grasshopper sparrow (*Ammodramus savannarum*)
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- Bell's sage sparrow (*Amphispiza belli belli*)
- Hoary bat (*Lasiurus cinereus*)
- Pocketed free-tailed bat (*Nyctinomops femerosaccus*)
- Big free-tailed bat (*Nytinomops macrotis*)
- Nelson's (desert) bighorn sheep (*Ovis canadensis nelsoni*)
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*)
- Stephen's kangaroo rat (*Dipodomys stephensi*)

- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)
- San Diego desert woodrat (*Neotoma lepida intermedia*)
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)

Based on the analysis provided in Appendix B, the following species were eliminated from further consideration either because (1) there are no recent local records of their occurrence in the vicinity of the project area, as determined through the CNDDB; or (2) although there are recent local records of their occurrence within the vicinity of the project area, habitat within the project area was determined to be to be marginal, limited, or otherwise unfavorable; or (3) the site does not likely provide suitable habitat for a sustaining population of this species. In addition, avian species may have been eliminated from further consideration because (1) they would use the project area only as a migrant or (2) they are not likely to reside or reproduce there due to a lack of appropriate habitat or because the project area is outside of their known breeding range. These species were assessed as "not likely to occur":

- Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*)
- Coast horned lizard (*Phrynosoma coronatum*)
- Tricolored blackbird (*Agelaius tricolor*)
- Pallid bat (*Antrozous pallidus*)
- Western yellow bat (*Lasiurus xanthinus*)
- Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*)
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)

Based on the analysis provided in Appendix B, the following species have either been observed within the project area (present), or their occurrence potential was assessed as "may occur" within the project area due to the presence of suitable habitat and recent local records in the project area vicinity. Brief species accounts for the following species are provided below:

- Burrowing owl (*Athene cunicularia*)
- California mastiff bat (*Eumops perotis californicus*)

Burrowing Owl

The burrowing owl is a California Species of Special Concern. Within California, this species occurs primarily in agricultural and grassland areas of interior and coastal valleys. They prefer dry, open, treeless grassland and desert scrubland, often in areas with little or no vegetation. Burrowing owls can also occupy and breed in highly modified habitats, including golf courses, airports, cemeteries, vacant lots in residential areas, and along shoulders of roadways. Typically, they occupy abandoned ground squirrel burrows. Breeding usually begins during March or April in southern California. Along coastal southern California, the distribution of the burrowing owl has been greatly reduced and localized due to loss of habitat through development.

Burrowing owls require large, open expanses of sparsely vegetated areas on gently rolling or level terrain, with an abundance of active small mammal burrows, particularly those of the California ground squirrel. The burrows of these rodents are a critical habitat feature for burrowing owls, as they modify and use squirrel (and other rodent) burrows for refugia, roosting, and nesting. They sometimes use artificial features, such as pipes, culverts, and nest boxes in areas where squirrel burrows are scarce (Robertson 1929). Mammal burrows are modified and enlarged by the owls. One burrow is typically used for nesting; however, satellite burrows are usually found in the immediate vicinity of the nest burrow within the defended territory of the owl.

The burrowing owl is crepuscular, foraging at or near dawn and dusk. They hunt by using short flights, running along the ground, hovering, or by using an elevated perch from which prey is spotted. They are opportunistic foragers (Haug et al. 1993), and their prey includes invertebrates and small vertebrates (Thomsen 1971). Their diet is composed of a variety of foods, primarily mice (*Peromyscus* spp. and *Microtus* spp.) and beetles. Beetles are taken with more frequency; however, per biomass, *Peromyscus* mice are dominant, followed by *Microtus* mice (Marti 1974). Although they eat mostly insects and small mammals, burrowing owls also may take reptiles, birds, and carrion. During the breeding season, there are significant declines in the percentage of vertebrate prey in the diet and increases in the invertebrate prey (Haug et al. 1993).

Burrowing owls typically nest in modified burrows of California ground squirrels (or other small rodents); the burrows of badgers are used on occasion. The nest chamber is lined with excrement, pellets, debris, grass, and/or feathers; other times it is unlined. The male attracts a female to the burrow and defends the nest site by calling in front of the burrow. Breeding occurs from March through August, with a peak in April and May. Clutch size is six to 11 eggs, with an average of seven to nine eggs; clutch size may increase in more northerly populations (Bent 1938). The young emerge from the burrow at about two weeks and can fly by about four weeks (Zarn 1974). Martin (1973) reported that 95% of the young fledged in one population, with a mean reproductive success of 4.9 young per pair.

There are 10 recent records of this species within 5 miles of the project area (CNDDB 2008; Figure 5). Suitable foraging and nesting habitat for burrowing owl occurs over much of the project area, within nonnative grassland and ruderal habitats. Burrowing owls may forage and nest within the project area.

California Mastiff Bat

California mastiff bat is a California Species of Special Concern. This species is the largest North American bat, with a wingspan of more than 22 inches. Characteristic traits include dark brown fur and characteristically large ears joined at the base and extending out over the forehead like a bonnet. They occur in rocky areas and cliff faces, roosting in cliff crevices and buildings in Southern California and Arizona, south to Mexico in small colonies of up to 100 individuals. The nursery period begins in June, when pups are born, and continues until the young are able to fly with adults. Little is known about the parturition period of this species within southern California, though most pups are likely born between June and August. Depending on when the pup was born, first flight may occur between September and November. This bat is known to forage on moths, crickets, grasshoppers, and other insects. Vocalizations are common and may be audible to the human ear. Actions that could adversely affect this species include disturbance or destruction of day or maternity roosts and removal of abandoned structures that may provide roosting habitat.

There is one recent record of this species within 5 miles of the project area (CNDDB 2008; Figure 5). Suitable roosting habitat exists in trees and abandoned structures at the project area. In addition, much of the project area provides suitable foraging habitat.

3.5.4 Nesting Migratory and Native Avian Species

Appropriate nesting habitat for birds protected under the MBTA and Fish and Game Codes 3503, 3503.5, and 3513 occurred overmost of the project area. Suitable nesting and foraging habitat includes all ruderal and grassland habitats as well as nesting sites in existing trees and structures.

3.6 OTHER SENSITIVE BIOLOGICAL RESOURCES

3.6.1 Wetlands and other Waters of the U.S.

No wetlands or other waters of the U.S. were identified within or adjacent to the project area.

3.6.2 Wildlife Corridors

Wildlife movement corridors are linear features whose primary wildlife function is to connect at least two significant habitat areas to each other (Beier and Loe 1992), thereby reducing effects of fragmentation and allowing for the movement of species between larger habitat areas. Wildlife corridors promote gene flow, allow re-colonization of areas following catastrophic events such as fire, prevent the loss of large animals by linking suitable habitat areas, and help to ensure the survival of native species that cannot compete with more aggressive nonnative species in fragmented habitats.

The project area is bordered on all sides by urban development and vacant parcels and does not support any native habitats. Though the project area may facilitate the movements of wildlife between undeveloped parcels, it does not serve as the sole property linking habitats in the area. Therefore, the project area itself does not serve as an important wildlife corridor linking two or more open space areas.

3.6.3 Local Regulations

Ontario General Plan and Guasti Plaza Specific Plan

Preservation and maintenance of parkway trees are regulated by City Municipal Code Title 10, Parks and Recreation, Chapter 2: Parkway Trees. The GPSP does not directly address potential impacts to biological resources in the Plan area; instead, the document focuses on the preservation of historical agricultural heritage and landscape themes by emphasizing the use of existing trees and supplements these with other plantings to reinforce the historic themes already found in the community. Trees within the project area have been fenced for preservation or boxed for transplanting on-site to ensure project compliance with the ordinance and the GPSP (Photograph 3). A list of trees observed by DEA and their preservation status at the time of the field survey is presented below (Appendix A).

- California pepper tree (*Schinus molle*) – fenced for preservation
- Peruvian tree cactus (*Cereus* spp.) – boxed for transplant
- Strawberry tree (*Arbutus unedo*) – open ground
- Mimosa tree (*Albizzia julibrissin*) – fenced for preservation
- Carob tree (*Ceratonia siliqua*) – boxed for transplant
- American sweet gum (*Liquidambar styraciflua*) – fenced for preservation
- River red gum (*Eucalyptus camuldulensis*) – select specimens fenced for preservation
- Silver dollar gum (*Eucalyptus polyanthemos*) – fenced for preservation
- Edible fig (*Ficus carica*) – boxed for transplant
- Fruitless mulberry (*Morus alba*) – fenced for preservation
- Lemon tree (*Citrus limon*) – fenced for preservation
- Chinese Tree-of-Heaven (*Ailanthus altissima*) – ornamental trees near residences
- California fan palm (*Washingtonia filifera*) – open ground under management

- Mexican fan palm (*Washingtonia robusta*) – open ground under management
- Mediterranean cypress (*Cupressus sempervirens*) – boxed for transplant

Photograph 3. California pepper trees fenced for preservation.

4. IMPACT ANALYSIS

4.1 BIOTIC HABITATS

Project implementation would result in the removal of approximately 5.24 acres of nonnative grassland and 11.64 acres of ruderal habitat. These habitats are not considered sensitive. However, impacts to nonnative grassland will contribute to the ongoing loss of habitat for burrowing owl and other species within the vicinity as a result of the proposed project.

4.2 SENSITIVE HABITATS

No sensitive habitats listed by CNDDB were identified within the project area. No impacts to sensitive habitats are expected to occur as a result of the proposed project.

4.3 SPECIAL-STATUS PLANTS

No special-status plant species listed by CNPS or CNDDB were determined to occur or have the potential to occur within the project area. Therefore, no impacts to special-status plant species are expected as the result of implementation of the proposed project.

4.4 SPECIAL-STATUS WILDLIFE

Impacts to special-status wildlife species, including burrowing owl, California mastiff bat, and nesting migratory and native avian species that could result from the proposed project are discussed in detail below.

4.4.1 Burrowing Owl

Development within the project area could potentially affect burrowing owl, either directly or indirectly, and would be considered a significant impact under CEQA. Impacts that could affect this species during project implementation include direct mortality and loss or alteration of suitable foraging and burrowing habitat in nonnative grassland and ruderal habitats within the project area.

4.4.2 California mastiff bat

Development within the project area could potentially affect California mastiff bat, either directly or indirectly, and would be considered a significant impact under CEQA. Impacts that could affect this species during project implementation include direct mortality, loss or alteration of suitable foraging habitat in open nonnative grassland areas, and loss of roosting sites, including abandoned buildings and mature trees.

4.4.3 Nesting Migratory and Native Avian Species

The project area and adjacent lands provides suitable nesting habitat for nesting avian species whose nests and young are protected under the MBTA and California Fish and Game Codes. Construction activities associated with the proposed project that result in ground disturbance and/or the removal of vegetation could have both direct and indirect impacts to these sensitive resources.

The breeding season for birds generally occurs from February 1 through August 31; implementation of construction activities associated with the project during this period could result in both direct and indirect impacts to nesting avian species. Direct project impacts would include the destruction of active nests, eggs, or young located within vegetation removed within the proposed project. Indirect impacts would include noise and disturbance associated with the construction activities that cause birds in adjacent habitats to abandon their nests. Any impacts (direct or indirect) that result in the abandonment or destruction of an active nest or the destruction of eggs or young of any protected avian species, including special-status species, would be considered a significant impact under CEQA.

4.4.4 Wetlands and other Waters of the U.S.

No wetlands or other waters of the U.S. were identified within or adjacent to the project area. No impacts to these habitats are expected to occur as a result of the proposed project.

4.4.5 Wildlife Corridors

No wildlife corridors were identified within the project area. Therefore, no impacts are expected to occur to wildlife corridors as a result of the proposed project.

4.4.6 Ontario General Plan and Guasti Plaza Specific Plan

The existing plan to protect and preserve mature trees within the project area has been implemented through protective fencing and transplanting of mature trees. No additional impacts are expected to occur as a result of the project.

5. RECOMMENDATIONS

5.1 BIOTIC HABITATS

Project implementation would result in potential impacts to approximately 5 acres of built-up land, 11.64 acres of ruderal habitat, and 5.24 acres of nonnative grassland. These habitats are not considered sensitive by CDFG. Impacts to sensitive biotic habitats are not expected to occur as a result of the proposed project but will contribute to the cumulative loss of undeveloped lands within the vicinity. No further recommendations are necessary.

5.2 SPECIAL-STATUS WILDLIFE

Recommendations to avoid or mitigate potential project impacts to burrowing owl and California mastiff bat are discussed in detail below.

5.2.1 Burrowing Owl

Suitable habitat for burrowing owl was identified within nonnative grassland habitat on the project area. The proposed project has the potential to affect burrowing owls that may occur and/or nest within the project area. According to the CDFG's *Staff Report on Burrowing Owl Mitigation* (1995), any of the following actions could potentially affect burrowing owls:

- Disturbance within 50 meters (approximately 160 feet) of burrows, which may result in harassment of owls at occupied burrows
- Destruction of natural and artificial burrows (culverts, concrete slabs, and debris piles that provide shelter to burrowing owls)
- Destruction and/or degradation of foraging habitat adjacent (within 100 meters) of an occupied burrow

According to the CDFG (1995), both breeding season and winter surveys should be conducted. SWCA recommends that the project area be surveyed for burrowing owl during the winter season, or between December 1 and January 31, to determine whether wintering burrowing owls occur there, and during the peak of the breeding season, or between April 15 and July 15, to determine whether burrowing owls nest there. The surveys should be conducted within one calendar year of the initiation of ground-disturbing activities associated with the implementation of the project. Regardless of the results of the focused surveys, a preconstruction survey for burrowing owls should be conducted within 30 days of the initiation of ground-disturbing activities associated with the implementation of the project, per guidelines recommended by the CDFG (1995).

If burrowing owls are determined to occur within the project area during either focused or preconstruction surveys, mitigation should include acquisition and protection of off-site habitat to offset the loss of foraging and burrowing/breeding habitat on the project area. A minimum of 6.5 acres of foraging habitat (based on providing a 100-yard foraging radius around the burrow) per pair or unpaired resident bird should be permanently protected. The protected lands should be within the vicinity of the project area in suitable habitat at a location approved by the CDFG. Any occupied burrows within the project area that will be destroyed by implementation of the project should be mitigated through enhancement of existing unsuitable burrows or creation of artificial burrows at a ratio of 2:1 on the protected lands site.

If burrowing owls are determined to occur within the project area during the preconstruction survey, mitigation measures would need to be implemented. If breeding owls are determined to occupy the project area or lands within 50 meters, a 50-meter buffer should be marked around the nesting burrow and avoided until the end of the breeding season (August 31) or until it has been determined by a qualified biologist that the adults and young have dispersed from the project area or buffer. Monitoring of the buffer by a qualified biologist would ensure that construction activities do not impact the breeding owls. If burrowing owls are discovered within the project area during the pre-construction survey outside of the nesting season, a 50-meter buffer should be marked around the occupied burrow and avoided until it has been determined by a qualified biologist that the owl has dispersed from the project area. Monitoring of the buffer by a qualified biologist would ensure that construction activities do not impact the owl prior to its dispersal from the area. Alternatively, eviction of non-breeding burrowing owls may be considered, as outlined by the CDFG (1995).

5.2.2 California Mastiff Bat

Construction within the project area may result in direct or indirect impacts to California mastiff bats. Potential measures that would mitigate direct impacts that result in mortality of immature bats include avoiding work on structures and large trees during the bat breeding season (June 1 through November 30). If this is not practical, then a preconstruction survey should be conducted by a qualified biologist prior to demolition of structures or removal of large trees where bat nursery roosts may be located. If nursery roosts that contain immature bats are discovered during the preconstruction survey, they should be protected until the young are able to fly. Loss of roosting and foraging habitat would not be considered a significant impact, as roosting and foraging habitat for this species (abandoned structures, trees, open fields, etc.) is common within the project area vicinity.

5.2.3 Nesting Migratory and Native Avian Species

SWCA recommends that ground-disturbing and vegetation removal activities associated with construction of the project be performed outside of the breeding season for birds, or between September 1 and January 31. If these project activities cannot be implemented during this time period, the project applicant should retain a qualified biologist to perform preconstruction nest surveys to identify active nests within and adjacent to (up to 500 feet) the project area. If the preconstruction survey is conducted early in the nesting season (February 1–March 15) and nests are discovered, a qualified biologist may remove the nests only after it has been determined that the nest is not active (i.e., the nest does not contain eggs, nor is an adult actively brooding on the nest). Any active non-raptor nests identified within the project area or within 300 feet of the project area should be marked with a 300-foot buffer, and the buffer area would need to be avoided by construction activities until a qualified biologist determines that the chicks have fledged. Active raptor nests within the project area or within 500 feet of the project area should be marked with a 500-foot buffer and the buffer avoided until a qualified biologist determines that the chicks have fledged. If the 300-foot buffer for non-raptor nests or 500-foot buffer for raptor nests cannot be avoided during construction of the project, the project applicant should retain a qualified biologist to monitor the nests on a daily basis during construction to ensure that the nests do not fail as the result of noise generated by the construction. The biological monitor should have the authority to halt construction if the construction activities cause negative effects, such as the adults abandoning the nest or chicks falling from the nest.

5.3 SURVEY UPDATES

The recommendations outlined above pertain to site conditions observed during the 2008 field season. Should more than two years lapse from the time of the original survey (October 28, 2008) until the

initiation of project-related construction activities, a general biological survey should be conducted by a qualified biologist in order to update the biological conditions of the project area and assess whether any changes to conditions there would warrant additional recommendations and/or changes to the recommendations provided herein.

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APPENDIX A:
Plant and Wildlife Lists

SPECIES OBSERVED OR DETECTED ON THE PROJECT SITE

Plant Species

Common Name	Scientific Name	Family	Vegetation Community	
			Ruderal	Nonnatve Grassland
Dicots				
California Pepper Tree *	*Schinus molle*	Anacardiaceae	X	X
Oleander *	*Nerium oleander*	Apocynaceae	X	
Algerian Ivy*	*Hedera canariensis*	Araliaceae	X	
English Ivy*	*Hedera helix*		X	
Brass Buttons*	*Cotula* spp.	Asteraceae	X	
Common Horseweed *	*Conyza canadensis*		X	
Coulter's Horseweed *	*Conyza coulteri*		X	
Common Sunflower *	*Helianthus annuus*		X	
Telegraph Weed	*Heterotheca grandiflora*		X	
Golden Crownbeard*	*Verbesina enceloides*		X	
Short-podded Mustard *	*Hirschfeldia incana*	Brassicaceae		X
London Rocket*	*Sisymbrium irio*		X	X
Peruvian Tree Cactus*	*Cereus* spp.	Cactaceae	X	
Mission Fig*	*Opuntia ficus-indica*		X	
Tumbling Oracle*	*Atriplex rosea*	Chenopodiaceae	X	X
Lambsquarters*	*Chenopodium album*		X	
Russian Thistle*	*Salsola tragus*		X	X
Goosefoot	*Chenopodium spp.*		X	
Strawberry Tree*	*Arbutus unedo*	Ericaceae	X	
Mimosa Tree*	*Albizzia julibrissin*	Fabaceae	X	X
Carob Tree*	*Ceratonia siliqua*		X	
Red-stemmed Filaree*	*Erodium cicutarium*	Geraniaceae	X	
American Sweet Gum *	*Liquidambar styraciflua*	Hamamelidaceae	X	
Cheeseweed*	*Malva parviflora*	Malvaceae		X
River Red Gum *	*Eucalyptus camaldulensis*	Myrtaceae	X	X
Silver Dollar Gum *	*Eucalyptus polyanthemos*		X	
Edible Fig *	*Ficus carica*	Moraceae	X	
Fig (resprout)*	*Ficus* spp.		X	
Fruitless Mulberry	*Morus alba*		X	
Bougainvillea*	*Bougainvillea* spp.	Nyctaginaceae	X	
Cut-leaved Evening Primrose	*Oenothera laciniata*	Oenothera	X	
Suncups	*Camissonia* spp.	Onagraceae	X	
Firethorn*	*Pyracantha coccinea*	Rosaceae	X	
Lemon Tree	*Citrus limon*	Rutaceae	X	
Chinese Tree-of-Heaven*	*Ailanthus altissima*	Simaroubaceae	X	
False Jimson Weed	*Datura wrightii*	Solanaceae	X	
Tree Tobacco*	*Nicotiana glauca*		X	
Puncture Vine *	*Tribulus terrestris*	Zygophyllaceae	X	

Common Name	Scientific Name	Family	Vegetation Community	
			Ruderal	Nonnatve Grassland
Monocots				
Ornamental Yucca	*Yucca* spp.	Agavaceae	X	
California Fan Palm	*Washingtonia filifera*	Arecaceae	X	
Mexican Fan Palm *	*Washingtonia robusta*		X	
Red Brome*	*Bromus madritensis* ssp. *rubens*	Poaceae	X	X
Saltgrass	*Distichlis spicata*		X	
Mediterranean Schismus *	*Schismus barbatus*		X	
Purple Needlegrass	*Stipa pulchra*		X	
Gymnosperms				
Mediterranean Cypress *	*Cupressus sempervirens*	Cupressaceae	X	

*Nonnative plant taxa

Tree Inventory

- 1. California pepper tree (*Schinus molle*) – fenced for preservation
- 2. Peruvian tree cactus (*Cereus spp.*) – boxed for transplant
- 3. Strawberry tree (*Arbutus unedo*) – open ground
- 4. Mimosa tree (*Albizzia julibrissin*) – fenced for preservation
- 5. Carob tree (*Ceratonia siliqua*) – boxed for transplant
- 6. American sweet gum (*Liquidambar styraciflua*) – fenced for preservation
- 7. River red gum (*Eucalyptus camuldulensis*) – select specimens fenced for preservation
- 8. Silver dollar gum (*Eucalyptus polyanthemos*) – fenced for preservation
- 9. Edible fig (*Ficus carica*) – boxed for transplant
- 10. Fruitless mulberry (*Morus alba*) – fenced for preservation
- 11. Lemon tree (*Citrus limon*) – fenced for preservation
- 12. Chinese Tree-of-Heaven (*Ailanthus altissima*) – ornamental trees near residences
- 13. California fan palm (*Washingtonia filifera*) – open ground under management
- 14. Mexican fan palm (*Washingtonia robusta*) – open ground under management
- 15. Mediterranean cypress (*Cupressus sempervirens*) – boxed for transplant

Wildlife Species

Common Name	Scientific Name	Sighting Conditions	Record Type	
			Observed	Detected
Reptiles				
Side-blotched lizard	*Uta stansburiana*	Occurs throughout site near debris piles, rubble, and dense vegetation.	X	
Birds				
American Crow	*Corvus brachyrhynchos*	Several birds perching in mature trees (Eucalypts) throughout the project site.	X	
Brewer's Blackbird	*Euphagus cyanocephalus*	Small group of birds perched on a vacant winery building in southwest of project site (3-5 birds).	X	
House Finch	*Carpodacus mexicanus*	Large numbers scattered throughout ruderal areas of the project site. High concentration within Tumbling Oracle and Russian Thistle stands (seeds).	X	
Mourning Dove	*Zenaida macroura*	Number of birds identified feeding throughout the project site.	X	
Northern Mockingbird	*Mimus polyglottos*	Conspicuous species found on high perch/fencing locations near brushy areas on the project site.	X	
Red-tailed Hawk	*Buteo jamaicensis*	One bird spotted in a high stag of a eucalyptus tree overlooking railroad right-of-way on project site.	X	
Mammals				
Antelope Ground Squirrel	*Ammospermophilus leucurus*	Two animals observed scurrying between dirt mounds near abandoned residences	X	

APPENDIX B:
Assessment of Special-status Species and Sensitive Habitats Within the Project Area Vicinity

Special-status Plants and Sensitive Habitats

Scientific Name	Common Name	Federal Status	State Status	CNPS Status	Blooming Period	General Habitat	Micro Habitat	Potential for Occurrence
Plants								
Abronia villosa var. aurita	Chaparral sand verbena	None	None	1B.1	Jan-Aug	Chaparral and coastal scrub.	Sandy soils. 80-1600 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Ambrosia monogyra	Singlewhorl burrobrush	None	None	2.2	Aug-Nov	Chaparral and Sonoran desert scrub.	Sandy soils. 10-500 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Ambrosia pumila	San Diego ambrosia	FE	None	1B.1	May-Sept	Chaparral, coastal scrub, and valley and foothill grassland.	Sandy loam or clay soil in valleys; persists where disturbance is only superficial.	**Not likely to occur:** Marginal habitat that is highly disturbed, no local records, not observed during survey.
Atriplex coulteri	Coulter's saltbush	None	None	1B.2	Mar-Oct	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.	Ocean bluffs, ridgetops, as well as alkaline low places. 10-440 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Berberis nevinii	Nevin's barberry	FE	SE	1B.1	Mar-Apr	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, north-facing slopes or in low grade sandy washes. 290-1575 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Calochortus clavatus gracilis	Slender mariposa lily	None	None	1B.2	Mar-May	Chaparral, coastal scrub. Endemic to Los Angeles County.	Shaded foothill canyons. Often on grassy slopes within other habitat. 420-760 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Calochortus plummerae	Plummer's mariposa lily	None	None	1B.2	May-July	Coastal scrub, chaparral, valley and foothill grasslands, cismontane woodland, and lower montane coniferous forest.	Rocky and sandy sites or granitic or alluvial material. Can be common after fire. 90-1610 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Calochortus weedii var. *intermedius*	Late-flowered mariposa lily	None	None	1B.2	May-July	Coastal scrub, chaparral, valley and foothill grassland.	Dry, rocky open slopes and rock outcrops. 120-850 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Chorizanthe parryi var. *parryi*	Parry's spineflower	None	None	3.2	Apr-June	Coastal scrub, chaparral.	Dry slopes and flats; sometimes at interface of two vegetation types, such as chaparral and oak woodland; dry, sandy soils. 40-1705 m.	**Absent:** No suitable habitat, no local records, not observed during survey.

Scientific Name	Common Name	Federal Status	State Status	CNPS Status	Blooming Period	General Habitat	Micro Habitat	Potential for Occurrence
Chorizanthe xanti var. *leucotheca*	White-bracted spineflower	None	None	1B.2	Apr-June	Mojavean desert scrub, Pinyon and juniper woodland	Blooms Apr – Jun. 300-1200 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Cladium californicum	California saw-grass	None	None	2.2	June-Sept	Freshwater or alkali marshes and seeps.	Freshwater or alkaline moist habitats. 60-600 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Claytonia lanceolata var. *peirsonii*	Peirson's spring beauty	None	None	1B.1	May-June	Upper montane coniferous forest and subalpine coniferous forest.	Granitic scree slopes, often with a sandy or fine soil component and granitic cobbles. 2360-2485 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Cordylanthus maritimus ssp. *maritimus*	Salt marsh bird's beak	FE	SE	1B.2	May-Oct	Coastal salt marsh and coastal dunes.	Limited to higher zones of the salt marsh habitat. 0-30 m.	**Absent:** No suitable habitat, no local records, not observed during survey.
Dodecahema leptoceras	Slender-horned spineflower	FE	SE	1B.1	Apr-June	Chaparral, coastal scrub (alluvial fan sage scrub). Historically from Los Angeles, Riverside and San Bernardino Counties. Extirpated from much of range.	Flood deposited terraces and washes. Associates include *Encelia, Dalea,* and *Lepidospartum* species. 200-760 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Dudleya multicaulis	Many-stemmed dudleya	None	None	1B.2	Apr-July	Chaparral, coastal scrub, valley and foothill grassland.	In heavy, often clayey soils or grassy slopes. 0-790 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	FE	SE	1B.1	June-Sept	Coastal scrub and chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 150-610 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Eriogonum microthecum var. *johnstonii*	Johnston's buckwheat	None	None	1B.3	July-Sept	Subalpine coniferous forest and upper montane coniferous forest.	Slopes and ridges on granite or limestone. 2210-2900 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Horkelia cuneata ssp. *puberula*	Mesa horkelia	None	None	1B.1	Feb-Sept	Chaparral, cismontane woodland, coastal scrub	Sandy or gravelly sites. 70-810 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None	None	1B.1	Feb-June	Coastal salt marshes, playas, valley and foothill grassland, and vernal pools.	Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None	None	1B.2	Jan-July	Chaparral and coastal scrub.	Dry soils and shrubland. 1-945 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.

Scientific Name	Common Name	Federal Status	State Status	CNPS Status	Blooming Period	General Habitat	Micro Habitat	Potential for Occurrence
Lilium parryi	Lemon lily	None	None	1B.2	July-Aug	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.	Wet, mountainous terrain often forested areas. Shady edges of streams in open boggy meadows and seeps. 1300-2790 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Linanthus concinnus	San Gabriel linanthus	None	None	1B.2	Apr-July	Lower montane coniferous forest and upper montane coniferous forest.	Dry rocky slopes, often in Jeffrey pine/canyon oak forest. 1575-2545 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Lycium parishii	Parish's desert-thorn	None	None	2.3	Mar-Apr	Coastal scrub and Sonoran desert scrub.	300-1000 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Monardella macrantha ssp. *hallii*	Hall's monardella	None	None	1B.3	June-Aug	Broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, valley and foothill grassland.	Dry slopes and ridges in openings within the above communities. 695-2195 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Monardella pringlei	Pringle's monardella	None	None	1A	May-June	Coastal scrub.	Sandy hills. 300-400 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Muhlenbergia californica	California muhly	None	None	4.3	July-Sept	Coastal sage, chaparral, lower montane coniferous forest, and meadows.	Usually found near streams or seeps. 400-2000 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Navarretia prostrata	Prostrate navarretia	None	None	1B.1	Apr-July	Coastal scrub, valley and foothill grasslands, and vernal pools.	Alkaline soils in grasslands or in vernal pools. 15-700 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Nolina cismontana	Peninsular nolina	Chaparral nolina	None	1B.2	May-July	Chaparral, Coastal scrub.	sandstone or gabbro soils, 140-1275 m. Blooms May-Jul.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Oreonana vestita	Woolly mountain-parsely	None	None	1B.3	May-Sept	Subalpine coniferous forest and upper montane coniferous forest.	High ridges on scree, talus, or gravel. 2410-3500 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Orobanche valida ssp. *valida*	Rock Creek broomrape	None	None	1B.2	May-July	Chaparral, pinyon-juniper woodland. Endemic to Los Angeles County.	On slopes of loose decomposed granite; parasitic on various chaparral shrubs. 1705-1820 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.

Scientific Name	Common Name	Federal Status	State Status	CNPS Status	Blooming Period	General Habitat	Micro Habitat	Potential for Occurrence
Pseudognaphalium leucocephalum	White rabbit-tobacco	None	None	2.2	Aug-Nov	Riparian woodland, cismontane woodland, coastal scrub, and chaparral.	Sandy, gravelly sites. 0-2100 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Senecio aphanactis	Rayless ragwort	None	None	2.2	Jan-Apr	Cismontane woodland and coastal scrub.	Drying alkaline flats. 20-575 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Sidalcea neomexicana	Salt Spring checkerbloom	None	None	2.2	Mar-June	Alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest, and Mojavean desert scrub.	Alkali springs and marshes. 0-1500m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Streptanthus bernardinus	Laguna Mountains jewel flower	None	None	4.3	June-July	Chaparral and lower montane coniferous forest.	Clay or decomposed granitic soils, sometimes in disturbed areas such as streamsides or roadcuts. 1440-2500 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Symphyotrichum defoliatum	San Bernardino aster	None	None	1B.2	July-Nov	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland.	In vernally mesic soils near ditches, streams, springs, 165-1000 m. Blooms Apr-May.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Symphyotrichum greatae	Greata's aster	None	None	1B.3	June-Oct	Chaparral and cismontane woodland.	Mesic canyons. 800-1500 m.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Habitats								
California Walnut Woodland		None	None			Dominated by California walnut (*Juglans californica*). Intergrades with oak woodlands, grassy understory	relatively moist, fine-textured soils of valley slopes and bottoms, as well as encircling rocky outcrops.	**Absent:** No suitable habitat, no local records, not observed during survey.

Scientific Name	Common Name	Federal Status	State Status	CNPS Status	Blooming Period	General Habitat	Micro Habitat	Potential for Occurrence
Coastal and Valley Freshwater Marsh		None	None			Dominated by perennial, emergent monocots to 4-5m tall. Scirpus and Typha.	Quiet sites (lacking significant current) permanently flooded by fresh water (rather than brackish, alkaline, or variable). Along the coast and in coastal valleys near river mouths and around the margins of lakes and springs	**Absent:** No suitable habitat, no local records, not observed during survey.
Riversidian Alluvial Fan Sage Scrub		None	None			Open vegetation on alluvial fans and outwashes on sandy, rocky alluvia during infrequent floods.	At the base of the San Gabriel Mountains. Dominated by *Artemesia tridentata, Eriogonum fasciculatum, Eriodictyon crassifolium, Yucca whipplei*, and *Lepidospartum squamatum*.	**Absent:** No suitable habitat, not observed during survey.
Southern California Arroyo Chub/Santa Ana Sucker Stream		None	None			Streams having sand, rubble, or boulder bottoms of clear water with riparian vegetation comprised of *Alnus rhombifolia, Platanus racemosa*, and *Salix* spp.	Streams within Southern California known to host Arroyo Chub/Santa Ana Sucker.	**Absent:** No suitable habitat, no local records, not observed during survey.
Southern Coast Live Oak Riparian Forest		None	None			Bottom lands and outer floodplains along larger streams, on fine-grained rich alluvium.	Dominated by *Quercus agrifolia*; open to locally dense evergreen riparian woodland, rich in herbs.	**Absent:** No suitable habitat, no local records, not observed during survey.
Southern Cottonwood Willow Riparian Forest		None	None			Sub-irrigated and frequently overflowed lands along rivers and streams.	Dominated by *Populus fremontii*, *P. trichocarpa*, and tree willows; tall, open, broadleaved winter-deciduous riparian forest with a shrubby willow understory.	**Absent:** No suitable habitat, no local records, not observed during survey.

Scientific Name	Common Name	Federal Status	State Status	CNPS Status	Blooming Period	General Habitat	Micro Habitat	Potential for Occurrence
Southern Riparian Forest		None	None			Dominated by elements characteristic of Southern Coast Live Oak Riparian Forest, Southern Arroyo Willow Riparian Forest, or Southern Cottonwood Willow Riparian Forest.	Species include *Populus, Salix,* and *Quercus agrifolia.*	**Absent:** No suitable habitat, no local records, not observed during survey.
Southern Sycamore Alder Riparian Woodland		None	None			Very rocky streambeds subject to seasonally high-intensity flooding.	Dominated by *Platanus racemosa* and often *Alnus rhombifolia*; tall, open, broadleafed winter-deciduous streamside stands which seldom form a closed canopy.	**Absent:** No suitable habitat, no local records, not observed during survey.
Southern Willow Scrub		None	None			Dense, broadleafed, winter-deciduous riparian thickets. Loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows.	Dominated by *Salix* spp., with scattered emergent *Populus fremontii* and *Platanus racemosa.*Along major rivers of coastal southern California.	**Absent:** No suitable habitat, no local records, not observed during survey.

Federal

FT = Federal Threatened

FE = Federal Endangered

FPT = Federal Proposed Threatened

FPE = Federal Proposed Endangered

FPD = Federal Proposed Delisting

FC = Federal Candidate

FD = Federal Delisted

State

CE = California listed as Endangered

CT = California listed as Threatened

CR = California Rare Species

SC = California Species of Special Concern

FP = California Fully Protected

Other

FSS = Forest Service Sensitive

BLMS = Bureau of Land Management Sensitive

CDFS = California Dept. of Forestry Sensitive

CNDDB = CA Natural Diversity Database (maintained by CDFG)

CNPS

List 1B = Plants rare or endangered in California and elsewhere

List 2 = Rare, threatened, or endangered in California, but more common elsewhere.

List 3 = We need more information about this plant (Review List).

0.1 = Seriously endangered in California (more than 80% of occurrences threatened/high degree and immediacy of threat)

0.2 = Fairly endangered in California (20%–80% occurrences threatened)

0.3 = Not very endangered in California (<20% of occurrences threatened)

CA-Endemic = Plant's native range is confined to California

Special-status Wildlife

Scientific Name	Common Name	Federal Status	State Status	Other	General Habitat	Micro Habitat	Potential for Occurrence
Invertebrates							
Cicindela tranquebarica viridissima	Greenest tiger beetle	None	None		Woodlands adjacent to the Santa Ana River basin.	Found in open spots between trees.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Callophrys mossii hidakupa	San Gabriel Mountains elfin butterfly	None	None		San Gabriel and San Bernardino Mountains at elevations from 3000 to 5500 ft.	Foodplant is *Sedum spathulifolium*; type locality is southern mixed evergreen forest.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Carolella busckana	Busck's gallmoth	None	None		Coastal sand dunes		**Absent:** No suitable habitat, no recent local records, not observed during survey.
Diplectrona californica	California diplectronan caddisfly	None	None		Fast-flowing, cool streams, San Bernardino County. Known only from the type locality and Thurman Flats.	Adults have been collected in May. *Diplectrona* larvae live in fixed retreats made mostly from plant materials, and spin attached silken "capture nets" which filter food particles from the water.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	FE	None		Only in areas of the Delhi Sands formation in southwestern San Bernardino and northwestern Riverside Counties.	Requires fine, sandy soils, often with wholly or partially consolidated dunes and sparse vegetation. Oviposition requires shade.	**May occur:** There is one record within 5-miles of the project area and the project site is located within the Ontario Recovery unit for the species. Area 1 of the project site is wholly underlain by Delhi series soil.
Ceratochrysis longimala	Cuckoo wasp	None	None		Flowers, arid soils	Lay their eggs in the nests of bees, wasps, and certain other host insects	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Fish							
Gila orcuttii	Arroyo chub	None	SC		Los Angles basin south coastal streams.	Slow-water stream sections with mud or sand bottoms. Feed on aquatic vegetation and associated invertebrates.	**Absent:** No suitable habitat, local records are from riverine habitat.
Rhinchthys osculus ssp. *3*	Santa Ana speckled dace	None	SC		Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles river system.	Requires permanent flowing streams with summer water temperatures of 17-20° C. Usually inhabit shallow cobble and gravel riffles.	**Absent:** No suitable habitat, local records are in riverine habitat.
Catostomus santaanae	Santa Ana sucker	FT	SC		Endemic to Los Angeles basin south coastal streams.	Habitat generalists but prefer sand, rubble, and boulder bottoms, cool clear water, and algae.	**Absent:** No suitable habitat, local records are from riverine habitat.

Scientific Name	Common Name	Federal Status	State Status	Other	General Habitat	Micro Habitat	Potential for Occurrence
Amphibians							
Taricha torosa torosa	Coast range newt	None	SC		Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow moving streams.	**Absent:** No suitable habitat, no local records, not observed during survey.
Batrachoseps gabrieli	San Gabriel Mountains slender salamander	None	None	FSS	Known only from the San Gabriel Mountains; found under rocks, wood, fern fronds, and on soils at the base of talus slopes.	Most active on the surface in winter and early spring.	**Absent:** No suitable habitat, no local records, not observed during survey.
Rana muscosa	Mountain yellow-legged frog	FE	SC		San Gabriel, San Jacinto, and San Bernardino Mountains.	Always encountered within a few feet of water. Tadpoles require 2-4 years to complete aquatic development.	**Absent:** No suitable habitat, no local records, not observed during survey.
Reptiles							
Actinemys marorata pallida	Southwestern pond turtle	None	SC		Inhabits permanent or nearly permanent bodies of water in many habitat types below 6000 ft.	Require basking sites such as partially submerged logs, vegetation mats, or open mud banks.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Phrynosoma coronatum	Coast horned lizard	None	SC	FSS	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions.	Prefers friable, rocky or shallow sandy soil.	**Not likely to occur:** Though there are 2 recent local records, the habitat is highly degraded and it was not observed during survey.
Coleonyx variegatus abbotti	San Diego banded gecko	None	None		Coastal and cismontane southern California.	Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Aspidoscelis tigris stejnegeri	Coastal western whiptail	None	None		Deserts and semi-arid areas with sparse vegetation and open areas. Also in woodland and riparian areas.	Ground may be firm soil, sandy, or rocky.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Crotalus ruber ruber	Northern red-diamond rattlesnake	None	SC		Chaparral, woodland, grassland, and desert areas.	Rocky areas and areas with dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	**Absent:** No suitable habitat, no recent local records, not observed during survey.

Scientific Name	Common Name	Federal Status	State Status	Other	General Habitat	Micro Habitat	Potential for Occurrence
Birds							
Aquila chrysaetos	Golden Eagle	None	SC, FP		Rolling foothill or coast-range terrain, where open grassland turns to scattered oaks, sycamores, or large digger pines.	Cliff-walled canyons provide nesting habitat in most parts of range; also large trees in open areas.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	FC	SE		Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwood, with a lower story of blackberry, nettles, or wild grape.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Athene cunicularia	Burrowing owl	None	SC	BLMS	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, especially California ground squirrel.	**May occur:** Suitable habitat exists on site, 10 local CNDDB records within 5 mi.
Cypseloides niger	Black swift	None	SC		Coastal belt of Santa Cruz and Monterey Co; central and southern Sierra Nevada; San Bernardino and San Jacinto Mtns.	Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above surf; forages widely.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Campylorhynchus brunneicapillus sandiegensis	Coastal cactus wren	None	SC		Southern California coastal sage scrub.	Requires tall *Opuntia* cactus for nesting and roosting.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Empidonax traillii extimus	Southwestern willow flycatcher	FE	SE		Riparian woodlands in southern California.		**Absent:** No suitable habitat, no recent local records, not observed during survey.
Vireo bellii pusillus	Least Bell's vireo (N)	FE	SE		Summer resident of southern California. Inhabits low riparian growth in vicinity of water or in dry river bottoms, below 2,000 ft.	Nests placed along margins of bushes or twigs projecting into pathways, usually willow, *Baccharis*, mesquite.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Polioptila californica californica	Coastal California gnatcatcher	FT	SC		Obligate permanent resident of coastal sage scrub below 2500 ft in southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes.	**Absent:** Though there is one recent local record, there is no suitable habitat and it was not observed during survey.
Dendroica petechia brewsteri	Yellow warbler	None	SC		Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging.	Also nests in montane shrubbery in open conifer forests.	**Absent:** No suitable habitat, no recent local records, not observed during survey.

Scientific Name	Common Name	Federal Status	State Status	Other	General Habitat	Micro Habitat	Potential for Occurrence
Icteria virens	Yellow-breasted chat	None	SC		Summer resident, inhabits riparian thickets of willow and other brushy tangles near water courses.	Nests in low dense riparian, consisting of willow, blackberry, and wild grape; forages and nests within 10 ft of the ground.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Ammodramus savannarum	Grasshopper sparrow	None	SC		Dense grasslands on rolling hills, lowland plains, valleys, and lower mountain slopes	Native grasslands with scattered shrubs	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None	SC		Southern California coastal sage scrub ad sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Amphispiza belli belli	Bell's sage sparrow	None	SC		Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in southern end of range.	Nest on ground beneath a shrub or in a shrub 6-18 inches above the ground. Territories about 50 yards apart.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Agelaius tricolor	Tricolored blackbird	None	SC		Highly colonial and most numerous in the central valley.	Requires open water, protected nesting substrate, and foraging area with insect prey.	**Not likely to occur:** Though there is 1 recent local record, the site is surrounded by intense development and is highly disturbed. No suitable breeding or foraging habitat.
Mammals							
Antrozous pallidus	Pallid bat	None	SC		Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Arid, low elevations (<6,000 feet); roost in deep crevices in rock faces, buildings, or bridges.	**Not likely to occur;** there is marginally highly disturbed forage and roost habitat within the project site. There is only one record within 5-miles of the project area, dated 1951.
Lasiurus cinereus	Hoary bat	None	None		Prefers open habitats or habitat mosaics with access to trees for cover & open areas or habitat edges for feeding.	Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	**Absent:** Marginal highly disturbed habitat, no recent local records.
Lasiurus xanthinus	Western yellow bat	None	None		Found in wooded areas and desert scrub.	Roosts in foliage, particularly in palm trees.	**Not likely to occur:** There are no recent local records in the vicinity. There are palm trees at the project site, but the habitat within the project area is highly disturbed and considered marginal.

Scientific Name	Common Name	Federal Status	State Status	Other	General Habitat	Micro Habitat	Potential for Occurrence
Eumops perotis californicus	California mastiff bat	None	SC	BLMS	Many open semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral.	Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	**May occur:** There is 1 recent local record in the vicinity and marginal roosting habitat in abandoned structures and trees exists on site.
Nyctinomops femerosaccus	Pocketed free-tailed bat	None	SC		Arid regions including pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats.	Rocky areas with high cliffs.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Nytinomops macrotis	Big free-tailed bat	None	SC		Lives in rocky areas of desert scrub or coniferous forests.	Roosts by day in crevices on cliff faces	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Ovis canadensis nelsoni	Nelson's (desert) bighorn sheep	None	None	FSS BLMS	Widely distributed from the White Mtns in Mono Co. to the Chocolate Mtns in Imperial Co.	Open, rocky, steep areas with available water and herbaceous forage.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE	SC		Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Dipodomys stephensi	Stephen's kangaroo rat	FE	ST		Annual and perennial grasslands. Also found in coastal scrub and sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass, and filaree. Burrows into firm soils.	**Absent:** There are no local records, habitat is marginal, and it was not observed during the survey.
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	None	SC		Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	**Not likely to occur;** 1 recent local record in the vicinity and marginal habitat at the project site. This species was not observed during the survey.
Chaetodipus fallax pallidus	Pallid San Diego pocket mouse	None	SC		Chaparral and open sandy areas; margins of the Mojave Desert on slopes of San Bernardino Mountains and Colorado Desert south to Mexico.	Nocturnal animals that burrow in sandy areas throughout the day and emerging at night to forage.	**Absent:** No suitable habitat, no recent local records, not observed during survey.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None	SC	FSS	Lower elevation grasslands and coastal sage communities in the Los Angeles basin.	Open ground with fine sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	**Not likely to occur;** Though there are 4 recent local records and suitable soils within the project area, the habitat there is highly disturbed.

Scientific Name	Common Name	Federal Status	State Status	Other	General Habitat	Micro Habitat	Potential for Occurrence
Neotoma lepida intermedia	San Diego desert woodrat	None	SC		Coastal scrub of southern California from San Diego County to San Luis Obispo County.	Prefers moderate to dense canopies; abundant in rock outcrops and rocky cliffs and slopes.	**Absent:** Though there are 2 recent local records, no suitable habitat exists, not observed during survey.
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None	SC		Intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges.	Coastal sage scrub habitats in southern California.	**Absent:** No suitable habitat, no recent local records, not observed during survey.

Federal

FE = Federally listed as Endangered

FT = Federally listed as Threatened

FC = Federal Candidate Species

FSC = U.S. Fish and Wildlife Service designated "Species of Concern"

N = Nesting, Nesting Colony or Rookery

W = Winter

State

CFP = California Department of Fish and Game designated "Fully Protected" or "Protected" – Permit required for "take."

SE = State listed as Endangered

ST = State listed as Threatened

SSC = California Department of Fish and Game designated "Species of Special Concern"

Other

BLMS = U.S. Bureau of Land Management designated "Sensitive" species

FSS = U.S. Forest Service designated "Sensitive" species

CDFS = California Department of Forestry designated "Sensitive" species