

BIOLOGICAL RESOURCES ASSESSMENT  
AND  
BURROWING OWL SURVEY REPORT

Altitude Business Centre  
City of Chino, California

Prepared for  
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## Summary of Information

### Report preparation date:

December 22, 2017.

Revised: May 16, 2018

The purpose of this report is to update the previous biological assessment report (M.J. Klinefelter 2015) which included the subject area of this report and is now referred to as the Altitude Business Center Project (the "Project"). This report is intended to provide documentation for City of Chino's environmental review of the proposed Project and includes the following:

- An update of existing conditions at the Project site in terms of biological resources, including vegetation, wildlife, habitats, soils, and waters/wetlands.
- A discussion of potential impacts to biological resources, including special status species, resulting from implementation of the proposed Project.
- Results of focused Burrowing Owl surveys.
- Recommended mitigation measures to avoid and/or minimize potential impacts to biological resources.

### Project site location:

The Project is located in the southern portion of the City of Chino (Figure 1, Regional Map). The City of Chino is located in the southwestern portion of San Bernardino County, California, and is south of the City of Ontario, west of the City of Eastvale, and east of the City of Chino Hills. The Project site is located approximately 5.2 miles west of Interstate 15 (I-15), approximately 1.8 miles east of State Route 71 (SR-71), and approximately 4.3 miles south of State Route 60 (SR-60). More specifically, the site is located directly south of Kimball Avenue and north of Bickmore Avenue, approximately 1,000 feet east of Euclid Avenue, and approximately 660 feet west of Rincon Meadows Avenue in the City of Chino, San Bernardino County, California (Figure 2, Vicinity Map). The majority of the Site is within southwest quarter of Section 29 and a small portion is within the southeast quarter of Section 30, Township 2 South, Range 7 West, San Bernardino Base and Meridian, on the U.S. Geological Survey (USGS) Prado Dam CA 7.5 minute quadrangle. The Project encompasses 11 existing parcels totaling 89.1 acres (the "Site").

### Related planning case numbers and APN:

Tentative Parcel Map No. 19756 (PL16-0456)

APNs: 1055-231-01 & -02; 1055-541-01 & -02; 1055-241-05, -06, & -07; 1056-101-02; 1056-111-04; and 1056-121-04

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Summary conclusions:

M.J. Klinefelter (MJK), on behalf of Richland Real Estate Fund, LLC, has prepared this updated biological resources assessment report for the Altitude Business Center Project (the “Project”) in the City of Chino (the “City”). Field investigations for this assessment was conducted at the Site on January 14, 2016 and May 15 of 2017 by biologist Mike Klinefelter. Focused plant surveys were conducted by David Bramlet in the spring/summer of 2017. Twelve focused Burrowing Owl surveys were conducted by Jason Berkley and Mike Klinefelter over a period from October 2015 through July 2017. This report was prepared by Mike Klinefelter who also conducted spatial data analysis, and prepared map figures using Geographic Information Systems (GIS) data and ESRI ArcGIS 10 software.

The Site has been subject to high levels of recurrent disturbance and alteration for many years. Based on historic aerial photo review, the Site has been used since at least prior to 1952 for agricultural and/or dairy operations and the production of crops (WRI 2017). No native vegetation communities are present at the Site; native plant diversity and cover is very low. There are no jurisdictional wetland or riparian habitats on-site. There are no windrows present on-site. Due to the general lack of native vegetation and the severe disturbances associated with past and present agricultural operations, habitat for native wildlife is limited and of low quality.

No special status plant species were detected at the Site during the focused special status plant surveys conducted in 2016 and 2017. Burrowing owl, a State species of concern, was observed in the former dairy located in the southern portion of the Site. Based on the assessment by botanist David Bramlet as part of the the special status plant surveys (Bramlet 2017), the Site has potential for seven special status plant species to occur. The Site also contains suitable habitat for a number of special status wildlife species, including nesting and foraging habitat for birds, and roosting and foraging habitat for bats. However, with appropriate implementation of recommended mitigation measures outlined in Section 5 of this report, the proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). The proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

There are no riparian habitats and no sensitive natural communities at the Site. The proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. No jurisdictional waters or wetlands are present at the Site. The proposed Project would not have a substantial adverse effect on any waters or wetlands subject to regulation by the U.S. Army Corps of Engineers (Corps), the Santa Ana Regional Water Quality Control Board (RWQCB), or CDFW.

The proposed Project would not conflict with any local policies or ordinances protecting biological resources, or with the provisions of any Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan areas. The Project is an infill development and adverse cumulative impacts to biological resources related to build-out of the City are anticipated to be less than significant assuming compliance with the policies of the City's General Plan and The Preserve Specific Plan and their associated environmental mitigation measures, as well as the recommended project-specific mitigation measures outlined herein.

As noted above, recommended mitigation measures are outlined in Section 5. If these mitigation measures and all other conditions of approval and mitigation measures required by the City - are appropriately implemented, potential adverse impacts to biological resources from implementation of the Project are expected to be less than significant.

# 1. Introduction

## 1.1 Purpose of the Report

The purpose of this Biological Assessment report is to document the biological resources and potential impacts associated with the proposed Altitude Business Centre project (the “Project”). As noted in the Summary of Information above, this report is an update to the previous biological assessment report (M.J. Klinefelter 2015) which included the subject area of this report. This report is intended to provide documentation for City of Chino’s environmental review of the proposed Project and includes the following:

- An update of existing conditions at the Project site in terms of biological resources, including vegetation, wildlife, habitats, soils, and waters/wetlands.
- A discussion of potential impacts to biological resources, including special status species, resulting from implementation of the proposed Project.
- Results of focused Burrowing Owl surveys.
- Results of sensitive plant species survey.
- Recommended mitigation measures to avoid and/or minimize potential impacts to biological resources.

The Project is located within the City’s Preserve Specific Plan Area (The Preserve), within Subarea 2 of the City’s Sphere of Influence (SOI). An Environmental Impact Report (EIR) was finalized for The Preserve in March 2003. The EIR analyzed impacts to biological resources on a programmatic level and identified specific mitigation measures to be applied to individual projects. EIR mitigation measure B-2 requires biological studies for individual projects within The Preserve. Mitigation measure B-3 required that the City of Chino develop a Resources Management Plan (RMP) to provide for the implementation of specific mitigation measures identified in the EIR. This biological report references both the EIR and the RMP.

The Preserve EIR concluded that the implementation of the EIR mitigation measures would reduce, avoid, lessen or compensate for some, but not all, of the adverse impacts to biological resources above (which includes the Project site) the 566-foot inundation line for Prado Basin. The loss of Burrowing Owl nesting and foraging habitat was determined to be significant at the project level and cumulatively at the regional level. Impacts to regional raptor populations were considered non-significant at the project level, but would be cumulatively significant. The EIR mitigation measures, including the preparation of the RMP, addressed the loss of upland wildlife habitat including for Burrowing Owls. Impacts to Delhi Sands flower-loving fly and/or its habitat were considered non-significant. The EIR determined that no significant adverse impacts would occur to wildlife movement in the region.

## 1.2 Location of Project

As noted in the Summary of Information above, the Project site is comprised of 11 existing parcels totaling approximately 89.1 acres. The Project site includes Assessor Parcel Numbers (APNs) 1055-231-01 & -02; 1055-541-01 & -02; 1055-241-05, -06, & -07; 1056-101-02; 1056-111-04; and 1056-121-04 (the “Site”) – and is located south of Kimball Avenue, north of Bickmore Avenue, approximately 1,000 feet east of Euclid Avenue, and approximately 660 feet west of Rincon Meadows Avenue in the City of Chino, San Bernardino County, California (Appendix A, Figure 1, Regional Map; Figure 2, Vicinity Map; and Figure 3, Project Site and Off-Site Map). The majority of the Site is within southwest quarter of Section 29 and a small portion is within the southeast quarter

of Section 30, Township 2 South, Range 7 West, San Bernardino Base and Meridian, on the U.S. Geological Survey (USGS) Prado Dam CA 7.5 minute quadrangle.

The City of Chino (City) is in the southwestern corner of San Bernardino County (County) and is in the central part of the Upper Santa Ana River Valley. It is approximately 37 miles east of the City of Los Angeles and 20 miles southwest of the City of San Bernardino. This portion of the valley is bounded by the San Gabriel Mountains to the north; the Chino Hills, Puente Hills, and San Jose Hills to the west; the Santa Ana River to the south; and Lytle Creek Wash on the east. The City is bounded by the City of Chino Hills to the west, unincorporated County land (near the City of Montclair) to the north, the City of Ontario to the northeast, and the City of Eastvale in Riverside County to the south.

As noted above, the Project Site is located within The Preserve. The Preserve is an area of approximately 5,435 acres of former and existing farm and dairy property located south of Kimball Avenue, north of State Route 71, west of Hellman Avenue, and east of Euclid Avenue. Regional access to The Preserve is provided via State Route 71 to the west, State Route 91 to the south, Interstate 15 to the east, and State Route 60 to the north. Euclid Avenue (SR 83) defines the western boundary of the planning area. Pine Avenue runs east-west through the planning area, providing a link via Schleisman Avenue to Interstate 15. Portions of Kimball and Merrill Avenues form the northern boundary. The area was annexed to the City of Chino in July 2003. Approximately half of the area will consist of residential, commercial, industrial and airport-related development. The other half will remain as open space, for natural, recreational, and agricultural uses. The Preserve will be comprised of a mixture of residential neighborhoods focused around a community core and a regional commercial center. The development will be interconnected with a multi-purpose open space feature, using a series of paseos and trails, and will be integrated with the Chino Airport. There will be a range of housing types with equestrian estates, contemporary apartments and condominiums, and entry-level housing (Chino, 2017).

The Site is approximately 29 miles from the Pacific Ocean and is located within the Lower Chino Creek subwatershed (HUC 180702030706) within the Santa Ana River watershed (HUC 18070203). The Santa Ana River is approximately 3.75 miles to the south-southeast. The northern portion of the Prado Flood Control Basin is approximately one mile south across Pine Avenue, and Chino Hills State Park is located approximately 3 miles west of the Site.

Driving directions from California State Route (SR) 60 to the Site are as follows:

Exit SR-60 at SR-83 (Euclid Avenue) and proceed 4.25 miles south to Kendall Avenue; turn left (east) onto Kendall Avenue and drive 0.4 mile, the Site is on the right (south) side of Kendall Ave.

### **1.3 Project Biological Assessment History**

In 2012 M.J. Klinefelter included the north-central portion of the Site as part of the biological assessment conducted for Tentative Tract Map 18858 (MJK, 2012). In 2015 M.J. Klinefelter prepared a biological assessment for the Chino Business Center including all areas of the Site except the previously assessed north-central portion (MJK, 2015). Included in the 2015 biological assessment was a survey and verification that conditions in the north central portion were generally unchanged from the 2012 assessment. Construction of TTM 18858 began in mid-2017 and includes an offsite stormwater detention basin in the north-central portion of the Project Site directly north of TTM 18858. Current surveys of the Site began in 2015 and continued through 2017.



## 1.4 Project Description

The Project involves the development of the 89.1-acre property. Implementation of the Project would involve the demolition of the subject property's existing residential and agricultural/dairy land uses and the construction and operation of a business center complex with up to 25 buildings ranging in size from 5,000 s.f. to 200,000 s.f. and totaling up to 1,313,000 s.f. of building space. The Project would include business park, light industrial, mini-warehouse, and warehouse land uses. The Project includes the installation of on-site utilities including storm drains, sewer lines, water lines (domestic and recycled), and fire service lines/fire hydrants that would connect to existing utilities beneath Kimball Avenue and/or Bickmore Avenue. The Project also includes ornamental landscaping consisting of trees, shrubs, and groundcovers. Landscaping would be provided along the Project site's frontages with Kimball Avenue, Bickmore Avenue, and proposed Mayhew Avenue, bordering on-site buildings, and in-and-around on-site water quality basins and parking lots.

Kimball Avenue and Bickmore Avenue would be widened and improved along the Project site's northerly and southerly boundary. The Project also would construct the full-width of the Mayhew Avenue segment that traverses the Project site, between Kimball Avenue and Bickmore Avenue and the off-site roadway improvements to Kimball Avenue (between Euclid Avenue and Rincon Meadows Avenue), Bickmore Avenue (between Euclid Avenue and the western Project boundary) and off-site utility improvements beneath the future alignment of Mayhew Avenue (between Bickmore Avenue and Pine Avenue). Figure 3, Project Site and Off-Site Map, shows the limits of the Project's potential off-site improvement area.

## 2. Methodology

Prior to conducting the field investigation, various applicable biological databases and reference documents were reviewed, including:

- Site Approval Conceptual Grading Plan Tentative Parcel Map 19756 (ProActive Engineering, Inc., 2016)
- General Biological Resources Assessment, Tentative Tract Map 18858. (M.J. Klinefelter, September 2012).
- General Biological Resources Assessment, Chino Business Center Project. (M.J. Klinefelter, June 2015).
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB) (CDFW, 2017-a)
- CDFW. Special Animals. State of California Resources Agency, Sacramento, California. (CDFW, 2017-f)
- U.S. Fish and Wildlife Service (USFWS) Carlsbad office special status species information (USFWS, 2017-a)
- California Native Plant Society's (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS, 2017)
- The CalFlora Database: Information on California plants for conservation, education, and appreciation (Calflora, 2017).
- City of Chino General Plan Final Environmental Impact Report. Prepared by Design, Community & Environment for the City of Chino. (Chino, 2010)
- The Preserve, Chino Sphere of Influence - Subarea 2, Final Environmental Impact Report - Volume 1 (Chino, 2003) (referred to herein as The Preserve EIR).
- U.S. Geological Survey (USGS) Prado Dam 7.5' quadrangle topographic map
- USFWS National Wetland Inventory Maps (USFWS, 2017-b)

- USFWS Critical Habitat Mapper (USFWS, 2017-c)
- U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS, 2017)
- NRCS Soil Survey Geographic (SSURGO) Database for San Bernardino County, California (Soil Survey Staff, 2017-a)
- NRCS List of Hydric Soils in California (NRCS, 2017-b)
- Recent and historical aerial imagery (Google Earth, 2017)
- Water Research Institute, CSUSB, The Chino Area Aerial Photo Collection (WRI, 2017)
- California Irrigation Management Information System (CIMIS) station detail reports (CIMIS, 2017).

Additional resources and documents that were reviewed as part of this biological assessment are listed in Section 8 of this report. For purposes of this report, individual plant nomenclature and taxonomy follow *The Jepson Manual, Second Edition* (Baldwin, et al., 2012) and online Jepson eFlora (UCB, 2017). The first time a plant or animal species is introduced in this report, both the scientific name and common name are given; thereafter, only the common name is used. General information regarding wildlife species present in the region, including taxonomy and nomenclature, follow the American Ornithologists Union (2017) for birds, Whitaker (1996) and Jones et al. (1997) for mammals, Stebbins (2003) for reptiles and amphibians, and Heath (2004) for butterflies.

A field investigation for this assessment was conducted on January 14, 2016 and April 19 of 2017 by Mike Klinefelter. A base map was produced prior to the field investigation showing the parcel boundaries overlaid on an aerial photograph. The base map was produced at a scale of 1:2,400, or 1"=200'. Additionally, lists of special status plant and animal species that may occur at the Site were compiled prior to the field investigation. During the investigation, the entire Site was systematically and diligently surveyed to inventory all biological resources present, including vegetation, birds, mammals, reptiles, amphibians, invertebrates, and any other wildlife. On-site habitats were assessed for suitability to support special status species and extra emphasis was placed on detecting special status species in the field. Soils, and the type and degree of site disturbance, were generally characterized. Areas adjacent to the Site were also observed to provide context and to enable evaluation of potential impacts to off-site resources.

A Trimble GeoXT handheld global positioning system receiver (GPS) was used in the field to identify the locations of significant resources as needed. Data collected from the GPS unit were downloaded into Trimble GPS Pathfinder Office software and differentially corrected to generate positions at sub-meter accuracy. GPS field data, Project plans, land cover/vegetation and soils information, and other relevant digital map data were incorporated into a Geographic Information System (GIS) using ESRI ArcGIS 10.2 software to analyze data and create map figures that represent conditions at the Site (Appendix A, Figures 1-8). Digital photographs were taken at the Site to characterize on-site conditions and document significant resources. Photographs were taken with a digital camera with integrated GPS. GeoSpatial Experts GPS-Photo Link software was used to process photographs, produce photo documentation, and to produce GIS data with location and compass direction of each photo. Site Photos are included in the Special Status Plan Survey within Appendix B.

Focused plant surveys were conducted by botanist David Bramlet on 30 May and 28 June 2017. Field notes were taken to record all plant species observed during the field surveys, and photographs were taken to document the existing conditions on the Site. The complete report

including a list of all plant species observed and site photographs is contained in Appendix B of this document.

The Site was surveyed for the presence of any oak woodland, windrow, wetland, riverine, riparian, and/or vernal pool habitat. During the field investigation, vegetation and land cover types on-site were recorded and classified. Vegetation/land cover classification was based on the types of vegetation communities used in The Preserve EIR. Vegetation/land cover types were documented in the field using the base map with the parcel boundaries overlaid on high-resolution aerial imagery. Then the field data were digitized in the GIS to delineate each polygon and enable the calculation of acreages for each type. The minimum mapping unit was 0.10 acre.

During the investigation and focused surveys for Burrowing Owl, each wildlife species detected on-site was recorded and identified. Wildlife species were detected by sight (including the use of 8x42 binoculars), vocalizations, burrows, nests, tracks and trails, scat, remains, scratch-outs, dusting bowls, and/or other signs. The Site was carefully evaluated for the presence of Burrowing Owl (*Athene cunicularia*) nesting and foraging habitat. A habitat assessment for Burrowing Owl (Burrowing Owl) was conducted in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (CDFG, 2012) and 12 focused surveys were conducted between October 2015 and August 2017. All potential Burrowing Owl nesting habitat, including any existing burrows; earthen berms or banks; cement culverts; cement, asphalt, rock, or wood debris piles; openings beneath cement or asphalt pavement; and other man-made structures, were carefully inspected for Burrowing Owl sign such as feces, pellets and feathers.

The Site was evaluated to determine if any areas may be regulated under the jurisdiction of the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the federal Clean Water Act (CWA), the California Department of Fish and Wildlife (CDFW) pursuant to Division 2, Chapter 6, Sections 1600-1616 of the California Fish and Game Code, and the Santa Ana Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA, Section 13260 of the California Water Code, and/or the Porter-Cologne Water Quality Control Act (Porter-Cologne). The evaluation was conducted using the most up-to-date regulations and written policy and guidance from the regulatory agencies to identify any and all waters that may be subject to federal and/or state jurisdiction (waters of the U.S. and/or state, including wetlands) at the Site, and, if present, to determine the boundary of each feature.

### **3. Existing Conditions**

#### **3.1 Site Description**

The general conditions of the Site and surrounding areas are portrayed in the Map Figures 1 through 8 in Appendix A and in the photos contained in the special status plan survey report (see Appendix B). Topography at the Site is generally level, sloping very gently to the south. Elevation ranges from approximately 577 feet above mean sea level (amsl) at the site's southwestern boundary to approximately 609 feet amsl near the site's northeastern boundary. The climate is arid and dominated by low annual rainfall, low soil moisture conditions, and relatively high evapotranspiration levels. The long-term average precipitation in the area is 13.2 inches per year (CIMIS, 2017).

The entire Site is heavily disturbed by past and present residential, agricultural, and dairy farm uses. The southern portion of the Site, abutting Bickmore Avenue, is occupied by two residential structures, two landscape plant nurseries, ancillary agricultural structures, and vacant structures associated with a former dairy use. The northeastern portion of the Site, which abuts Kimball Avenue, is occupied by two residential structures, an inactive dairy farm and ancillary dairy farm structures/facilities. The northwest and central portion of the Site is comprised of active agricultural fields.

The Site has been subjected to high levels of recurrent disturbance and alteration for many years. Based on a review of historic aerial photography, the Site has been used since at least 1952 for dairy, agricultural, nursery operations, as well as the production of row crops (WSI, 2017, Google Earth, 2017). At the time of the field investigation, alfalfa (*Medicago sativa*) was being cultivated in the northwestern and central portion of the Site, see Photos A1 through A6 in Appendix B. The alfalfa field comprises approximately 39 acres on-site and it also extends off-site to the northwest. At the time of the site investigation, there were three large debris piles totaling approximately 0.66-acre in the north-central portion of the Site within the alfalfa field. They consist primarily of broken concrete, with some broken asphalt, metal and other building materials interspersed throughout, most likely the remnants of the former dairy operation. In mid-2017 construction began on TTM 18858, including a temporary detention basin being constructed on the Site directly north of TTM 18858.

The southern portion of the Site has two nursery operations separated by an inactive dairy. The western nursery has been in operation since at least 1994 and the eastern nursery has been in operation since at least 2002 (Google Earth, 2017). This area contains various buildings, infrastructure, greenhouses, shade structures, container plants, and internal roads and paths. Vehicles and equipment are stored throughout these areas. There are 2 homes with associated driveways and ornamental plantings along Bickmore Avenue in the southeastern corner of the Site. The inactive dairy contains corals and fenced areas that are intermittently used for various livestock, primarily sheep and goats. Additionally vehicles and equipment are stored in this area of the Site, and there are remnant fences, roads, and concrete structures from the former dairy operations.

The northeastern portion of the Site consists of a former dairy that operated until approximately 2013 (Google Earth, 2017). Imagery shows that active dairy operations were discontinued sometime between April 2013 and April 2014; however, at the time of the field investigation, the majority of dairy infrastructure was still present at the parcel (corrals, feedlots, shade structures, milking facilities, hay barn, etc.). There are two residences adjacent to the north boundary along Kimball Avenue, each with associated driveways and ornamental plantings. Strips of agricultural land approximately 100-125 feet wide (fallow at the time of the field investigation) flank the former dairy areas and residences along the western and south boundary of the inactive dairy.

The Chino Airport is located directly north of the Project Site across Kimball Avenue. Dairies are located south of the western parcels across Bickmore Avenue. Directly west of the western parcels are McBride's RV Storage and croplands. To the southeast are the Meadow Square Apartment Homes as well as future tracts of residential development that are under construction. A new residential development and public park were under construction directly to the east of the easternmost boundary. Much of the land in this area is being converted from dairy/livestock operations and agriculture to residential housing in accordance with The Preserve Specific Plan.

Offsite improvements are proposed for Kendall Avenue from the intersection of Euclid Avenue east to Rincon Meadows Avenue, Bickmore Avenue from the intersection of Euclid Avenue east to Mayhew Avenue, and Mayhew Avenue from Bickmore Avenue south to Pine Avenue. Both Kendall Avenue and Bickmore Avenue are existing paved roads with both existing in-ground and above-ground infrastructure and a maintained shoulder. The proposed offsite improvement area of Kendall and Bickmore Avenue is developed and devoid of vegetation. Mayhew Avenue is not paved, however, the recent construction of sewer and stormdrain systems has left the entire width of the proposed offsite portion of Mayhew Avenue graded and devoid of vegetation.

### 3.2 Vegetation

Figure 5 (Vegetation and Land Use Map) in Appendix A shows the distribution of on-site vegetation/land cover types. As noted in Section 2 above, the classification types are based on the classification system used in The Preserve EIR. The photos found in the Special Status Plant Survey found in Appendix B of this report show vegetation/land cover types at the Site and surrounding areas. A compendium of plant species detected on-site is provided in Appendix D (Table 2) and in Appendix A of the Special Status Plant Survey found in Appendix B of this report.

On-site vegetation consists of a mix of primarily non-native plant species and a low number of native species. Native species diversity and cover is extremely low. As noted above, the entire Site has been highly disturbed by ongoing agricultural and nursery operations, residential uses, and former dairy operations. There are no native vegetation communities at the Site. Overall, vegetation consists of cultivated crops (alfalfa, sorghum, barley), non-native weeds and ornamental/horticultural species, and a low number of native species that are common and widespread in the region. In terms of floral diversity, a total of 148 vascular plant species, including 125 non-native species (84 percent of the total) and 23 native species (16 percent of the total), were recorded at the Site. One of the native species on-site is California fan palm (*Washingtonia filifera*); these palms have been planted as ornamental specimens (i.e., they are not naturally occurring on-site). Although native species account for 16% of the total plant species detected on-site, non-native species account for approximately 98% of the relative plant cover at the Site. The Site is generally unable to support stands of native vegetation due to the repeated disturbances and alterations associated with the ongoing land uses on-site. Due to the general lack of native vegetation and the ongoing disturbances on-site, habitat for native wildlife is extremely limited and of low quality.

No special status plant species were detected at the Site. Based on a review of existing literature conducted by David Bramlet for the Special Status Plant Surveys (Bramlet, 2017), four special status plants have some potential to occur on the Site. A discussion of special status plant species is provided in Section 4.4.1. There are no sensitive natural communities present on-site, and no oaks, windrows, wetland, riverine, riparian, and/or vernal pool habitat. A discussion of sensitive natural communities is provided in Section 4.4.2. Six vegetation/land cover types were identified at the Site, as described in the following subsections.

#### 3.2.1 Agricultural Land - Active Fields (Croplands)

As noted in Section 1.3 above, alfalfa was being cultivated in the northwestern and north central portion of the Site at the time of the field investigations. The alfalfa field comprises approximately 39.0 acres on-site and it also extends off-site to the northwest (Figure 5, Vegetation and Land Use Map). These areas have been intensely farmed over many years; row crops have been cultivated in these same areas since 1994 (Google Earth, 2017). Ongoing activities include clearing, disking, tilling, installation of crops of irrigation, and harvesting.

Typical species found within the alfalfa fields consisted of: Bermuda grass (*Cynodon dactylon*), Persian knot weed (*Polygonum argeocoleon*), rescue grass (*Bromus catharticus*), goose grass (*Eleusine indica*), cheeseweed (*Malva parviflora*), lamb's quarters (*Chenopodium album*), barnyard grass (*Echinochloa crus-galli*), summer cypress (*Kochia scoparia*), rough pigweed (*Amaranthus deflexus*), dwarf nettle (*Urtica urens*), yellow sweet clover (*Melilotus indicus*), prickly lettuce (*Lactuca serriola*), flax-leaved horse weed (*Erigeron bonariensis*), annual rattlesnake weed (*Euphorbia serpens*), and field bindweed (*Convolvulus arvensis*). Other areas within these fields contained: bull thistle (*Cirsium vulgare*), spiny clotbur (*Xanthium spinosum*), weedy cudweed (*Pseudognaphalium lueto-album*), prickly lettuce, prickly sow thistle (*Sonchus asper*), lesser swine cress (*Lepidium didymus*), Russian thistle (*Salsola tragus*), common horse weed (*Conyza Canadensis*), nettle-leaved goosefoot (*Chenopodium murale*), alkali heliotrope (*Heliotropium curassavicum*), London rocket (*Sisymbrium irio*), and western field dodder (*Cuscuta campestris*). Other species found in this area included: Mediterranean tamarisk (*Tamarix ramosissima*), Bermuda grass, goose grass, annual rattlesnake weed, five-hook bassia (*Bassia hyssopifolia*), barnyard grass, and narrow-leaved (*Asclepias fasciculatus*).

There are constructed berms (ranging between 2-8 feet in height) consisting of native soil and debris along the perimeter of the agricultural field. Non-native weeds and a few native weedy species were present at the edges of the crop rows and on the berms. The most widely distributed species along the western and eastern berms (2-3 feet high) were Bermuda grass, bindweed, cheeseweed, wild radish (*Raphanus sativus*), and rattlesnake sandmat (*Euphorbia albomarginata*). The berm on the southern end of the field separating the field from the landscape nurseries to the south is approximately 8 feet high and contained a relatively dense cover of Russian thistle (*Salsola tragus*), summer cypress, cheeseweed, London rocket, and red brome (*Bromus madritensis* subsp. *rubens*). There are a few individuals of native mulefat (*Baccharis salicifolia* subsp. *salicifolia*) and blue elderberry (*Sambucus nigra* subsp. *caerulea*) along the western portion of the berm. These are located in upland landscape positions and are not associated with any riparian areas or wetland features (none are present on-site). They appear to have colonized the area via wind-dispersed seed in areas at the edge of the agricultural field where there is excess irrigation runoff.

Additionally, in the north central portion of the Site within the active agricultural land area are several piles of concrete rubble. These are shown on Figure 5, Vegetation and Land Use Map, as Concrete. Based on a review of aerial photography, the former dairy was decommissioned sometime in 2005 and the concrete from driveways and structures was consolidated into 3 piles at that time. They have remained at the Site since that time.

### 3.2.2 Agricultural Land - Fallow Fields

In the northern portion of the Site along their eastern boundary there was a strip of fallow fields approximately 100-125 feet wide and the area to the south and east of inactive dairy areas and residences. These areas of fallow fields comprise approximately 8.1 acres on-site (Figure 5, Vegetation and Land Use Map). These areas were at times during the various surveys that were conducted in 2016 and 2017 planted in wheat (*Triticum aestivum*) and sorghum (*Sorghum bicolor*). There were few weeds observed in these fields during times of active cultivation at various times during the field surveys. Disturbed areas on the margins of these fields contained: summer cypress, London rocket, foxtail barley (*Hordeum murinum* ssp. *leporium*), rough pigweed, Palmer's pigweed (*Amaranthus palmeri*), cheeseweed, five-hook bassia, nettleleaved goosefoot (*Chenopodium*

*murale*), velvet leaf (*Abutilon theophrasti*), prickly lettuce, bull mallow (*Malva nicaeensis*), serrate-leaved saltbush (*Atriplex suberecta*), little-seed canary grass (*Phalaris minor*), and Russian thistle.

### 3.2.3 Agricultural Land - Dairy

In the north-east portion of the Site, dairy operations were active from at least 1994 through April 2013 (Google Earth, 2015) and dairy infrastructure was still present in the area at the time of field investigations. The area comprises approximately 9.4 acres on-site (Figure 5, Vegetation and Land Use Map). Much of the area consists of bare ground and some non-native weeds had also begun to colonize. Where present, non-native weed cover was moderate, consisting primarily of summer cypress, Russian thistle, London rocket, Bermuda grass, red brome, and wild radish. Native species were mostly absent. There were five blue elderberry individuals adjacent to the hay barn at the southern end of the former dairy and a few individuals of mulefat, willow weed (*Persicaria lapathifolia*), southern cattail (*Typha domingensis*), and Goodding's black willow (*Salix gooddingii*) growing in an abandoned concrete watering trough.

### 3.2.4 Agricultural Land - Pasture

At the time of the field investigation, goats, sheep, and Shetland Ponies were kept in a corral in the area between the 2 landscape nurseries (Figure 3 Site Map, and Figure 5, Vegetation and Land Use Map). This area has been classified as pasture land. It contains bare ground; no vegetation was present. The pasture comprises approximately 2.5 acres on-site.

### 3.2.5 Developed

Areas classified as Developed at the Site include the residences and driveways, as well as landscape nursery operations including various buildings, infrastructure, greenhouses, shade structures, container plants, storage areas, vehicles and equipment, and internal roads and paths. Developed areas comprise approximately 20.4 acres on-site (Figure 5, Vegetation and Land Use Map). These areas contained a variety of non-native ornamental species including non-native turf grasses, shrubs, and trees (Appendix D, Table 1), as well as areas of bare ground and asphalt/concrete. No native vegetation communities were present; the vegetation present consisted of horticultural species planted for their aesthetic and utilitarian values.

### 3.2.6 Disturbed

The Disturbed classification used in this assessment refers to areas that are not developed but have been disturbed repeatedly over many years and consequently vegetation consists predominantly of non-native species and/or bare ground. Disturbed areas comprise approximately 9.0 acres on-site (Figure 5, Vegetation and Land Use Map). Areas classified as Disturbed include the area between the 2 developed landscape nursery areas in the southwest portion of the Site. This area was formerly used for dairy operations and is now vacant. An additional smaller area classified as disturbed exists along the western boundary in the northwest corner of the western-most landscape nursery. Vehicles and equipment are stored in these areas, and there are remnant fences, roads, and concrete structures from the former dairy operations. Trash and debris are scattered throughout.

## 3.3 Wildlife

Vegetation associations form the basis of wildlife habitats. They provide the primary plant productivity upon which wildlife depends, along with nesting and denning sites, escape cover and protection from adverse weather. In general, more complex associations (with more layers of vegetation and more plant species) provide more niches for wildlife and, thereby, provide higher value wildlife habitat than less complex vegetation communities. Native habitats throughout the majority of the City of Chino and the surrounding areas have been developed or have been altered

and disturbed. These areas contain little native vegetation or natural open space and provide limited and low quality habitat for wildlife species. Wildlife species are likely to utilize any remnant patches of open space, native vegetation, and ornamental landscaped areas such as parks and golf courses in the vicinity. Areas to the south of the Site (e.g., Prado Flood Control Basin, Santa Ana River, and Cleveland National Forest) and west of the Site (Chino Hills State Park) contain relatively large, contiguous open spaces that provide higher quality habitat for wildlife, including a number of special status species.

There are no native vegetation communities at the Site and consequently habitat for native wildlife is limited and of relatively low quality. Wildlife diversity is low. The entire Site has been highly disturbed over many years through agricultural and dairy operations. A total of 64 wildlife species were detected during the Site investigation, including 44 bird species, 6 mammal species, 2 reptiles species, and 12 insects. The majority of the wildlife species detected on-site are common, widely distributed, and adapted to living in proximity to human development. Additionally, there were 5 domesticated animals observed on the Site during various surveys. A compendium of all animal species detected on-site is provided in Appendix D (Table 2).

### 3.3.1 Birds

The Site provides foraging and cover habitat for year-round residents, seasonal visitors, and migrating song birds, as well as foraging habitat for raptor species (foraging - active and fallow fields, disturbed areas, wastewater basin). Twenty-two common bird species were observed at the Site and on the adjacent properties (Appendix D, Table 1). Common species observed include: Rock Dove (*Columba livia*), Mourning Dove (*Zenaida macroura*), House Finch (*Carpodacus mexicanus*), House Sparrow (*Passer domesticus*), Northern Mockingbird (*Mimus polyglottos*), European Starling (*Sturnus vulgaris*), Black Phoebe (*Sayornis nigricans*), Say's Phoebe (*Sayornis saya*), Western Kingbird (*Tyrannus verticalis*), American Crow (*Corvus brachyrhynchos*), Turkey Vulture (*Cathartes aura*), Red-tailed Hawk (*Buteo jamaicensis*), Great Egret (*Ardea alba*), Killdeer (*Charadrius vociferous*), Eurasian Collared-Dove (*Streptopelia decaocto*), Common Raven (*Corvus corax*), Song Sparrow (*Melospiza melodia*), Lesser Goldfinch (*Carduelis psaltria*), Barn Swallow (*Hirundo rustica*), Tree Swallow (*Tachycineta bicolor*), Red-winged blackbird (*Agelaius phoeniceus*), Hooded Oriole (*Icterus cucullatus*), Savannah Sparrow (*Passerculus sandwichensis*), and Western Meadowlark (*Sturnella neglecta*). The agricultural fields may support species such as California Horned Lark (*Eremophila alpestris actia*), Grasshopper Sparrow (*Ammodramus savannrum*), Ferruginous Hawk (*Buteo regalis*), American Robin (*Turdus migratorius*) and others.

Two special status raptor species were observed on-site: Northern Harrier (*Circus cyaneus*) and Burrowing Owl (*Athene cunicularia*) both of which are Species of Special Concern in California. A Northern Harrier was foraging over the agricultural fields and a pair of deceased Burrowing Owl were observed in the inactive dairy area between the two landscape nurseries in the southern portion of the Site. American Kestrel (*Falco sparverius*), Sharp-shinned Hawk (*Accipiter striatus*), and Cooper's Hawk (*Accipiter cooperii*) were observed in the vicinity of the Site. Brush Cottontail (*Sylvilagus bachmani*) and California Ground Squirrel were observed on-site and they are likely attractive food sources for larger local raptors including Red-tailed Hawk (observed foraging on-site). Other raptor species that may be present in the vicinity include great Horned Owl (*Bubo virginianus*), Barn Owl (*Tyto alba*), Merlin (*Falco columbarius*), Prairie Falcon (*Falco mexicanus*), and others.



A discussion of special status wildlife species is provided in Section 3.6. Information regarding focused surveys for Burrowing Owl is provided in Section 3.7. In addition to raptor species, water fowl, wading birds, and shorebirds would be expected to be associated with the wastewater basins located south of the Site. These offsite basins may be used by migratory and/or overwintering birds for food, cover, and shelter.

### 3.3.2 Mammals

Common mammal species expected in the vicinity include California Ground Squirrel, Virginia Opossum (*Didelphis virginiana*), Botta's Pocket Gopher (*Thomomys bottae*), Coyote (*Canis latrans*), Common Raccoon (*Procyon lotor*), and Striped Skunk (*Mephitis mephitis*). Eleven mammal species were detected at or near the Site, five of which are domesticated. Mammals observed on or near the Site include California Ground Squirrel, Desert Cottontail, Botta's Pocket Gopher, Long-tailed weasel (*Mustela frenat*), coyote, and domestic dog, cat, horse, goat, and sheep. Domestic dogs and cats prey on native wildlife including small mammals, birds, and reptiles, and their presence generally disturbs wildlife. There is potential foraging habitat for bats at the Site, and there is roosting habitat such as large trees and structures on the Site. California Ground Squirrels are responsible for major damage throughout the state and active management in the area of agricultural fields is common practice. Based on the limited number of ground squirrels observed, there is most likely active management to reduce the number of ground squirrels within the active agricultural fields and landscape nurseries on the Site.

### 3.3.3 Reptiles

Reptilian diversity and abundance typically varies with vegetation type and character. Many species prefer only one or two vegetation types; however, most species will forage in a variety of habitats. Many reptile species that occur in open areas use rodent burrows for cover, protection from predators, and refuge during extreme weather conditions. Common reptile species in the vicinity include Western Fence Lizard (*Sceloporus occidentalis*), Side-blotched Lizard (*Uta stansburiana*), Southern Alligator Lizard (*Elgaria multicarinata*), Gopher Snake (*Pituophis catenifer*), and Common Kingsnake (*Lampropeltis getula*). Habitat for reptiles on-site is of relatively low quality due to the general lack of native vegetation and ongoing disturbances associated with agricultural uses. The only reptile species detected on or near the site were Western Fence Lizard and Gopher Snake.

### 3.3.4 Amphibians

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (i.e., remaining beneath the soil in burrows or under logs and leaf litter, and emerging only when temperatures are low and humidity is high). Aquatic amphibians are dependent on standing or flowing water for reproduction, and they emerge to breed once the rainy season begins. Breeding habitats include fresh water marshes and open water (reservoirs, permanent and temporary pools and ponds, and perennial streams). Based on the overall absence of native vegetation, the disturbed condition of the Site, and the lack of consistent water sources, the likelihood that amphibians are present on-site is low. None were detected during the field investigation. Amphibian species that may be present in the vicinity of the Site include American Bullfrog (*Lithobates catesbeianus*), Pacific Treefrog (*Pseudacris regilla*), Western Toad (*Bufo boreas*) and California Treefrog (*Pseudacris cadaverina*). Active dairy wastewater treatment basins, Lower Chino Creek, Prado Flood Control Basin, and the Santa Ana River likely contain suitable habitat for locally common amphibians, as well as potential habitat for special status amphibian species.

### **3.3.5 Invertebrates**

The Site and vicinity are home to a variety of common invertebrate species. Twelve common insect species were detected at the Site during the field investigation (Appendix D, Table 2). Federally endangered Delhi Sands Flower-loving Fly (DSFLF) habitat includes coastal sage scrub, grassland, and alluvial sage scrub overlaying Delhi series soils in southwestern San Bernardino and northwestern Riverside counties. This species requires fine, sandy soils, often with wholly or partly consolidated dunes, typically classified as belonging to the Delhi soil series, and sparse vegetation. No DSFLF were observed during the field investigation and none are expected based on site conditions and the absence of Delhi soils.

## **3.4 Soils**

The USDA Natural Resources Conservation Service Web Soil Survey (NRCS, 2017-b) documents three soil types at the site: Chino silt loam, Chualar clay loam, and Grangeville fine sandy loam (Figure 6, Soils Map). Summary descriptions of these soil types are provided below. The soil characteristics observed at the Site do not conform exactly to what is documented by NRCS due to past and present near-surface disturbance and alteration. However, the native subsoil characteristics likely conform more closely to the typical soil profile descriptions.

### **3.4.1 Chino silt loam**

The majority of the Site is mapped as Chino silt loam. It is a somewhat poorly drained soil found primarily in basins and flood plains. It is composed of alluvium derived from mixed sources. The depth to restrictive features and water table is more than 80 inches. The frequency of flooding and ponding is rare. The capacity of its most limiting layer to transmit water is moderately high and runoff is slow to very low. In a typical profile, silt loam is found from 0 to 16 inches, and silty clay loam is found from 16 to 60 inches in depth. While the Chino silt loam series is not identified as a hydric soil, the NRCS List of Hydric Soils (NRCS, 2017-a) identifies the series as containing minor components (soils and/or landforms) that are hydric. The unnamed remnant fan component of this soil series represents approximately 5 percent of the Chino silt loam series. The Site does not contain any remnant fan components and there are no indicators of hydric soils. Based on site conditions, hydric soils are not expected.

### **3.4.2 Chualar clay loam**

Chualar clay loam underlays small areas in the southern portion Site. It is a well-drained soil found primarily on alluvial fans and is composed of alluvium derived from mixed sources. The depth to restrictive features and water table is more than 80 inches. Flooding and ponding typically do not occur. The capacity of its most limiting layer to transmit water is moderately high and runoff is medium. In a typical profile, clay loam is found from 0 to 36 inches, and loam is found from 36 to 67 inches in depth. While the Chualar clay loam series is not identified as a hydric soil, the NRCS List of Hydric Soils (NRCS, 2017-a) identifies the series as containing minor components (soils and/or landforms) that are hydric. The unnamed drainageways component of this soil series represents approximately 5 percent of the Chualar clay loam series. The Site does not contain any drainageway components and there are no indicators of hydric soils. Based on site conditions, hydric soils are not expected.

### **3.4.3 Grangeville fine sandy loam**

Grangeville fine sandy loam is found in the southern portion of the Site. It is a somewhat poorly drained soil found primarily on alluvial fans. It is composed of alluvium derived from granite. The depth to restrictive features and water table is more than 80 inches. The frequency of flooding is

rare and ponding typically does not occur. The capacity of its most limiting layer to transmit water is high and runoff is very low. In a typical profile, fine sandy loam is found from 0 to 12 inches, and sandy loam, fine sandy loam, loam is found from 12 to 60 inches in depth. While the Grangeville fine sandy loam series is not identified as a hydric soil, the NRCS List of Hydric Soils (NRCS, 2017-a) identifies the series as containing minor components (soils and/or landforms) that are hydric. The unnamed depressions component of this soil series represents approximately 5 percent of the soil series. The Site does not contain any depression components and there are no indicators of hydric soils. Based on site conditions, hydric soils are not expected.

### 3.5 Jurisdictional Waters including Wetlands

The Site was evaluated to determine if any areas may be subject to Corps, RWQCB, and/or CDFW jurisdiction. Prior to the field investigation, information and data from the following sources were reviewed as part of this evaluation:

- Tentative Parcel Map 19756 (ProActive Entginneering., February 2017)
- Recent and historical aerial imagery
- USFWS National Wetland Inventory (NWI) maps
- NRCS Web Soil Survey
- NRCS List of Hydric Soils in California
- USGS Prado Dam 7.5 minute quadrangle topographic map.

Based on a review of these sources, no areas were identified that were likely to contain jurisdictional waters. A former dairy wastewater treatment basin to the south of the eastern portion of the Site is mapped as wetland by the USFWS National Wetland Inventory online mapping program (USFWS-b, 2017). However, this basin is offsite and was addressed in the documentation and environmental analysis for Tentative Tract Map 20008. This basin served the dairy (now inactive) in the northeastern portion of the Site. There were no water quality treatment basins located within the Project boundary. Offsite directly to the north of the eastern portion of the Site along the south side of Kimball Avenue is a stormwater detention basin. This facility appears to capture runoff from the Chino Airport north of Kimball Avenue (Figure 3, Site Map).

### 3.6 Special Status Plants and Animals

As indicated previously in this report, database and literature searches were conducted to determine which special status plant and wildlife species may potentially occur at the site, and on-site habitats were assessed during the field investigation for suitability to support any and all special status plant and wildlife species that may occur in the vicinity. Based on this evaluation process, it was determined that the Site contains habitat that is suitable to support at least four special status plant species. Therefore botanist David Bramlet conducted special status plant surveys for the Project. No special status plant species were detected at the Site during the special status plant surveys conducted by Mr. Bramlett (Appendix B). Two special status wildlife species were detected during the field investigation: Northern Harrier and Burrowing Owl. The Site may provide potential nesting and foraging habitat for a number of other special status bird species, as well as bat species. Refer to Section 4.4 for details; that section provides a special status species assessment and the results are summarized in Tables 1 and 2 in Appendix C. The results of a Burrowing Owl focused survey is provided in Section 3.7 below.

### 3.7 Burrowing Owl Focused Survey

As part of a previous investigation of the Site that included adjacent properties to the southeast of the Site, MJK determined that Burrowing Owl nesting and foraging habitat was present at the Site. Therefore, focused Burrowing Owl surveys were initiated on the Site and the adjacent Tentative Tract Map 20008 property in October 2015 using the methods and other pertinent information contained in the California Department of Fish and Game (CDFG) Staff Report on Burrowing Owl Mitigation dated March 7, 2012 (CDFG, 2012). [Note: CDFG is now known as the California Department of Fish and Wildlife, or CDFW]. Within 5 miles of the Site, 26 accounts of Burrowing Owl have been recorded in the CNDDDB and 3 accounts have been recorded in the Carlsbad USFWS database. The nearest account of Burrowing Owl occurrence is approximately 0.40 mile to the east of the Site, south of Bickmore Avenue in an area that is now a residential development (CDFG, 2017-a; USFWS, 2017-a).

#### 3.7.1 Methodology

Burrowing owls require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows (e.g., ground squirrels, etc.). As a critical habitat feature need, they require the use of rodent or other burrows for roosting and nesting cover. Burrowing owls may also use pipes, culverts, concrete rubble, and nest boxes where natural burrows are scarce. The Site contains both nesting and foraging habitat for Burrowing Owl.

MJK conducted 12 separate focused surveys for Burrowing Owl on the Site and adjacent properties from October 2015 through July 2017. Surveys were conducted in both the breeding and non-breeding seasons. The surveys were conducted by wildlife biologist Jason Berkley with support from Mike Klinefelter. Focused Burrowing Owl surveys were conducted on the following dates: in 2015 on October 21, November 19, December 17; in 2016 on January 14, April 21, June 8, June 28, July 15; and in 2017 on April 30, May 14, June 23, and July 15 (see Table 1 below). Surveys were conducted by walking pedestrian transects throughout the accessible areas of the Project site. Inaccessible areas (such as active livestock corrals) were inspected with binoculars. Burrows were inspected for the presence of diagnostic owl sign; including “whitewash” (owl excrement), regurgitated pellets, bones, feathers, etc.

#### 3.7.2 Burrowing Owl Survey Results

California ground squirrel burrows of the size and type used by Burrowing Owls were observed along the berm on the southern portion of the agricultural field directly north of the landscape nurseries and under the edge of concrete driveways in the inactive dairy area between the two landscape nurseries. Two deceased Burrowing Owls were found within the inactive dairy on the southern portion of the Site between the two landscape nurseries during the survey conducted on January 14, 2016 (Figure 7, Burrow Locations). CDFW was contacted and the remains were retrieved by CDFW warden Wardlow. No other sign (whitewash, pellets, small mammal bones, etc.) of Burrowing Owl was observed on the entire site during surveys prior to January 14, 2016 or during the 8 surveys conducted after. During surveys conducted in 2017 two Burrowing Owls were observed utilizing burrows along a berm off-site approximately 400 feet south of the Site on the western boundary of Tentative Tract 20008 (Figure 7).

Table 1. Burrowing owl survey information

<b>Date</b>	<b>Start Time</b>	<b>End Time</b>	<b>Weather</b>	<b>Visibility</b>	<b>Surveyor(s)</b>
10/21/2015	6:35	10:00	clear, 61-76 F, wind 0-2 mph	excellent	Jason Berkley, Mike Klinefelter
11/19/2015	6:05	8:10	clear, 48-58 F, wind 0-3 mph	excellent	Jason Berkley, Mike Klinefelter
12/17/2015	6:15	7:45	clear, 40-46 F, wind 0-2 mph	excellent	Jason Berkley, Mike Klinefelter
1/14/2016	6:30	9:30	overcast, 48-50 F, wind 0 mph	1-2 miles	Jason Berkley, Mike Klinefelter
4/21/2016	6:00	9:30	cloud cover, 55-71 F, wind 0 mph	excellent	Jason Berkley
6/8/2016	7:30	10:30	5% cloud cover, 63-72 F, wind 0-1 mph	excellent	Jason Berkley
6/28/2016	5:15	8:15	50% cloud cover, 70-78 F, wind 0 mph	good	Jason Berkley
7/15/2016	5:30	7:30	clear, 60-66 F, wind 0-1 mph	excellent	Jason Berkley
4/30/2017	6:45	9:45	clear, 62-72 F, wind 0 mph	excellent	Jason Berkley
5/14/2017	5:30	9:00	clear, 55-67 F, wind 0 mph	excellent	Jason Berkley
6/23/2017	5:15	8:00	100% cloud cover, 58-63 F, wind 0 mph	1-2 miles	Jason Berkley
7/15/2017	5:30	8:00	clear, 72-80 F, wind 0 mph	excellent	Jason Berkley

The two deceased burrowing owls were intact and did not appear to be the victim of predators; however, domestic dogs and cats were encountered at or near the Site during the surveys and rodent control is often used in agricultural operations and landscape nurseries. Burrowing owl, especially nestlings and juveniles, are subject to increased risk of predation from predators such as those observed on the site (dogs, cats, larger raptors, coyotes, weasels, etc). Additionally these ground dwelling birds are at risk from agricultural operations such as cultivating, discing, irrigation, application of pesticides, mowing, operating farm equipment, etc.

In summary, there is suitable nesting and foraging habitat for Burrowing Owl at the Project Site. A series of 12 focused Burrowing Owl surveys were conducted over a period of 2 years. Two deceased burrowing owls were found in the southern portion of the Site during a survey conducted in January 2016. See Section 5.2.3 for recommended mitigation measures to avoid impacts to Burrowing Owl.

#### 4. Impacts

This section provides a discussion of potential impacts to biological resources that may occur as a result of the Project development. Figure 8 in Appendix A shows the proposed Project impact area overlaid on an aerial photograph. The entire Site will be developed along with various offsite improvements within the existing Kimball and Bickmore Avenues and within the proposed Mayhew Avenue to the south. As noted above, MJK prepared a biological resources assessment report that included the Site along with adjacent parcels to the southeast in June 2015 (MJK, 2015). Conditions at that Site have remained generally unchanged from those described in the MJK biological resources assessment of 2015. Focused Burrowing Owl surveys had not been conducted at the time of the 2015 report and this report provides additional analysis of impacts to Burrowing Owl.

#### 4.1 Vegetation

Construction of the Project as proposed would result in the direct loss of on-site vegetation consisting primarily of active agricultural croplands, non-native weeds, ornamental/horticultural species (including primarily ornamental trees), and a low number of native species. Because a large portion of the Site is actively cultivated for the production of crops and much of the remaining area is dominated by developed and disturbed areas, native species only account for approximately 2% of the relative plant cover at the Site. The Site does not support stands of native vegetation due to the repeated disturbances and alterations associated with the historic and current agricultural land uses on-site. Table 2 below shows proposed impacts to on-site vegetation/land cover types.

Table 2. Proposed Impacts Vegetation/Land Cover Types

<b>Vegetation/Land Cover Type</b>	<b>On-Site Impact (Ac)</b>	<b>Off-Site (Ac)</b>
AG-Active	39.0	
AG-Dairy	9.4	
AG-Fallow	8.1	
AG-Pasture	2.5	
Concrete	0.7	
Developed	20.4	15.4
Disturbed	9.0	5.2

Indirect impacts to adjacent vegetation communities in the vicinity could result from adverse “edge effects” which can occur along development edges. Construction and grading activities increase airborne dust particulates which have the potential to disrupt the vitality of plants in the vicinity of the Project. The introduction of invasive non-native plant species can adversely affect native plant cover and diversity in the vicinity, as well as adversely modify habitat for wildlife. However, vegetation on the properties adjacent to the Site, as well as those in the greater vicinity, consists primarily of non-native and horticultural species; indirect impacts to any native vegetation in the area are expected to be minimal.

Offsite vegetation impacts associated with proposed improvements to Kimball Avenue, Bickmore Avenue, and Mayhew Avenue will be minimal. The offsite impact area along both Kimball and Bickmore Avenues consists of either already paved road with a high volume of traffic or areas devoid of vegetation within the maintained shoulder and utility right of way (ROW). Utilities were installed within the Mayhew Avenue ROW south to Pine Avenue recently and the entire offsite area was disturbed by the utility construction activity. No impacts to vegetation are expected within the offsite impact areas shown on Figure 3.

#### 4.2 Wildlife

Direct impacts to wildlife resources from Project construction would be associated with removal and disruption of habitat, potentially resulting in the displacement or death of wildlife. Implementation of the proposed Project would result in the loss of disturbed, generally low quality habitat that provides limited nesting, foraging, roosting, and denning opportunities for wildlife. Construction would result in the direct removal of potential nesting and foraging habitat for bird species. Birds that nest on the ground that were detected on-site include Burrowing Owl, Northern Harrier, Killdeer, Savannah Sparrow, Mourning Dove, and Meadowlark. Horned Larks also nest on the ground and may occur on or near the Site. Other common and special status bird species nest in vegetation

that is present on-site (grasses, shrubs, agricultural fields). Direct impacts to birds (including Burrowing Owl and other raptors) can be avoided through pre-construction nesting/roosting surveys as outlined in Sections 5.2.2 and 5.2.3.

Construction may result in the loss of common small mammals, reptiles, invertebrates and other slow-moving animals that may reside in the proposed impact area. More mobile wildlife species that are utilizing the Site would be forced to move into adjacent areas of open space, which would consequently increase competition for available resources in those areas. This situation may result in the loss of individuals that cannot successfully compete. However, Project impacts to non-sensitive wildlife species would be less than significant, as the loss of these species would not result in any of the following:

- Cause a substantial reduction of the habitat of a wildlife species
- Result in a drop in a wildlife population below self-sustaining levels
- Eliminate a native plant or animal community
- Substantially interference with the movement of any resident or migratory wildlife species.

Birds can be indirectly affected by construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities. Indirect impacts to birds due to construction-related noise may occur during construction. Wildlife species utilizing nearby areas may be indirectly affected by Project implementation, thereby decreasing biodiversity beyond the actual development envelope. Potential long-term indirect impacts to local wildlife could include, but are not limited to the following:

- Habitat degradation due to non-native plant and animal invasion
- Habitat fragmentation
- An inherent increase in human activity
- Increased ambient noise
- Higher night-time light levels
- The increased threat of road-kill by traffic
- Deposition of trash and debris
- Increased population of nest predators, which would adversely affect breeding bird populations
- Exposure to urban pollutants (e.g., fertilizers, pesticides, herbicides, and other hazardous materials)
- Soil erosion.

#### **4.3 Jurisdictional Waters including Wetlands**

Based on the assessment described in Section 3.5, there are no jurisdictional waters of the U.S. or state (including wetlands) present at the Site; no impacts to jurisdictional waters will occur. Moreover, since there are no wetlands at the Site, no impacts to wetland habitats or plant and animal species are anticipated as a result of Project implementation.

#### **4.4 Special Status Species**

The following is a discussion of special status species that may occur in the vicinity, their potential to occur at the Site, and impacts to those species that may result from implementation of the proposed Project. Special status species are those that have been given special recognition by federal, state, and/or local conservation agencies and organizations due to limited, declining, or

threatened population sizes. For the purpose of this evaluation, a species was considered to have special status if it met one or more of the following criteria:

- Currently listed as threatened or endangered under the federal Endangered Species Act (FESA)
- Currently listed as rare, threatened, or endangered under the California Endangered Species Act (CESA), or the California Native Plant Protection Act
- Proposed or candidate for listing as threatened or endangered under the FESA or CESA
- Included on CNPS Rare Plant Ranks 1A, 1B, 2, 3, or 4
- CDFW Fully Protected Species
- Federal Species of Special Concern
- Species of Special Concern in California
- Locally rare species – those with limited distributions within the vicinity, whether they are common elsewhere or whether they are considered imperiled, threatened, or endangered by resource management agencies.
- Other species protected under Section 15380 of the California Environmental Quality Act (CEQA).

The potential for special status plants and wildlife to occur at the Site was assessed based upon various species' life history information and the range and distribution of those special status species known to occur in the region. This information was correlated with on-site conditions such as vegetation communities, habitat composition and quality, soils, aquatic resources, and elevations.

A records search was conducted using the following sources:

- California Natural Diversity Database and associated GIS data files, maintained by CDFW (CDFW 2017-a)
- Carlsbad USFWS office species accounts (GIS data files) (USFWS, 2017-a)
- CNPS Online Inventory of Rare and Endangered Plants of California (CNPS, 2017)
- Consortium of California Herbaria (Jepson, 2017-b)
- The CalFlora Database: Information on California plants for conservation, education, and appreciation (Calflora, 2017)
- CDFW Vegetation Classification and Mapping Program List of California Terrestrial Natural Communities (VegCAMP List)
- City of Chino General Plan Final Environmental Impact Report. Prepared by Design, Community & Environment for the City of Chino. (Chino, 2010)
- The Preserve, Chino Sphere of Influence - Subarea 2, Final Environmental Impact Report - Volume 1 (The Preserve EIR) (Chino, 2003).

A records search was conducted using CNDDDB and USFWS (Carlsbad Office) species GIS data (CDFW, 2017-a; USFWS, 2017-a) to determine which special status species have been recorded in the vicinity. These sources present collections of incidental species accounts that have been reported to the database. It should be noted that these sources do not provide definitive evidence of species' presence; similarly, absence from the lists cannot be interpreted to mean that a species is not present.

In addition to reviewing CNDDDB and USFWS species accounts (which include special status plant species), a search for additional special status plant species that have been recorded in the vicinity was conducted by consulting the CNPS Inventory of Rare and Endangered Plants (CNPS, 2017-a). CNPS and CDFW recommend employing a 9-quadrangle search for records of special status plant



species; the search area typically includes the 8 quads surrounding the quad in which the site is located. The Site is located in the northeastern portion of the Prado Dam USGS quad. Using the typical 9-quad search method (which includes the 8 surrounding quads), the search area would have included the following quads: San Dimas, Yorba Linda, Orange, Black Star Canyon, Corona South, Corona North, Guasti, and Ontario. However, the San Dimas, Yorba Linda, Orange, and Black Star Canyon quads generally encompass lands with significantly different topography, elevations, soils, land use/cover, and vegetation communities than those of the Site, including the Chino Hills, Santa Ana Mountains, and coastal areas in Orange County. Therefore, these 4 quads were omitted and the CNPS database search included the following 4 quads instead: San Bernardino South, Fontana, Corona North, and Riverside West. These are the nearest quads to the Site that contain the most similar topography, elevations, soils, land use/cover, and vegetation communities. These quads are within the Upper Santa Ana River Valley generally east of Chino Hills and Santa Ana Mountains, south of the San Gabriel and San Bernardino Mountains, and west of the Box Spring Mountains.

The Consortium of California Herbaria (CCH) on-line database (Jepson, 2017-b) and the Biological Resources sections of The Preserve EIR were also consulted to assess which special status plant species may occur at the Site or in the vicinity. The USFWS online Critical Habitat Mapper was also consulted; the Site is not within USFWS-designated or proposed critical habitat for any plant or wildlife species listed as federally threatened or endangered (USFWS, 2017-c). There is critical habitat for 5 species within approximately 10 miles of the Site. There is Santa Ana Sucker (*Catostomus santaanae*) critical habitat approximately 3.25 miles southeast of the Site within the Santa Ana River channel. There is Least Bells' Vireo (*Vireo bellii pusillus*) (LBV) critical habitat approximately 0.6 miles to the southwest. This is where riparian habitat exists in northern portion of the greater Prado Basin. There is also LBV critical habitat approximately 3.5 miles southeast, in riparian habitat along the Santa Ana River. There is Southwestern Willow Flycatcher critical habitat approximately 1.5 miles to the south-southwest in the Prado Basin and approximately 1.7 miles to the southeast along Cucamonga and Mill Creek. There is coastal California gnatcatcher critical habitat approximately 5.5 miles southwest (Chino Hills State Park) and 8.5 miles northeast of the site. There is Brounion's milk vetch (*Astragalus brauntonii*) critical habitat approximately 7.25 miles to the southwest of the Site. However, as discussed below, based on site conditions and the lack of suitable habitat, none of these species are expected to occur on-site.

Based on the species assessment, those special status species that have some potential to utilize the Site are discussed in the following subsections. Tables 1 and 2 in Appendix D summarize this information.

#### 4.4.1 Special Status Plants

As noted in Section 3.8, no special status plant species were detected at the Site during the focused surveys for special status plants conducted by botanist David Bramlet (Appendix B). Overall the Site is extremely disturbed and there are no native vegetation communities present. Based on the species assessment, in relation to the Site's location, general lack of native vegetation, and disturbed condition, Mr. Bramlet identified seven special status plant species that have the potential to occur on-site (see below) (Federal and state listing status and CNPS Rare Plant Ranks<sup>1</sup> are shown

<sup>1</sup> **Federal/State Status Codes:**

FE = Listed as Federally Endangered under Federal Endangered Species Act (FESA)

CE = Listed as Endangered in California under California Endangered Species Act (CESA)

FC = Candidate for protection under FESA

**CNPS Rare Plant Ranks (CRPR):**

1A = California Rare Plant Rank 1A (formerly List 1A): Plants Presumed Extinct in California

after each species). Table 2 in Mr. Bramlet's report (Appendix B) list the other rare plant species that were assessed but deemed unlikely to occur on-site. A total of 16 rare plant species were evaluated. The following special status species have a potential to occur on-site:

- Chaparral sand verbena (*Abronia villosa* var. *aurita*) – None/None, CRPR 1B1
- lucky morning-glory (*Calystegia felix*) – None/None, CRPR 3.1
- Smooth tarplant (*Centromadia pungens* ssp. *Laevis*) – None/None, CRPR 1B1
- Panicle tar plant (*Deinandra paniculata*) – None/None, CRPR 4.2
- Southern California black walnut (*Juglans californica*) – None/None, CRPR 4.2
- Robinson's pepper-grass (*Lepidium virginicum* subsp. *menziesii*) – None/None, CRPR 4.3
- Salt Spring Checkerbloom (*Sidalcea neomexicana*) – None/None, CRPR 4.3

As stated in the special status plant survey conducted by David Bramlet and included in Appendix B, "The field surveys conducted in 2017 did not locate any special status plant species on the project site. Overall, this parcel has little, if any, potential habitat for any of the special status plant species known from the area of the proposed project." Therefore, no impacts to any special status plant species will occur as a result of the proposed Project implementation.

#### 4.4.2 Sensitive Natural Communities

Four sensitive natural communities have been recorded on the CDFW VegCAMP list within a 5-mile CNDDB search radius (CDFW, 2017-a). These habitats include:

- California Walnut Woodland (this species is now known as Southern California black walnut)
- Southern California Arroyo Chub/Santa Ana Sucker Stream
- Southern Cottonwood Willow Riparian Forest
- Southern Sycamore Alder Riparian Woodland.

None of these natural community types are present at the Project Site. Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland are present along the Santa Ana River. California Walnut Woodland is present in scattered locations in the vicinity, primarily in the Chino Hills and foothills of the Santa Ana Mountains. There are no Southern California black walnut trees or any native woodlands of any type at the Site. There are no other sensitive natural communities on-site; therefore no impacts to sensitive natural communities will occur as a result of proposed Project implementation.

#### 4.4.3 Special Status Wildlife

As discussed in this report, overall the Site is extremely disturbed and the quality of wildlife habitat quality is low. However, as noted in Section 3.6, two special status wildlife species were detected at the Site during the field investigation: Northern Harrier and Burrowing Owl. Based the species assessment, the following special status wildlife species also have some potential to utilize the Site

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1B = California Rare Plant Rank 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elsewhere

2 = California Rare Plant Rank 2 (formerly List 2): Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3 = California Rare Plant Rank 3 (formerly List 3): Plants About Which We Need More Information - A Review List

4 = California Rare Plant Rank 4 (formerly List 4): Plants of Limited Distribution - A Watch List

#### Threat Ranks:

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

0.2 = Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

0.3 = Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

(for birds and bats, the potential for nesting and foraging is indicated; federal and state listing status are shown after each species and listing codes are provided below).<sup>2</sup>

### Birds

- Tricolored Blackbird (*Agelaius tricolor*) – Foraging – None/SSC
- Burrowing Owl (*Athene cunicularia*) – Nesting and Foraging – None/SSC – 2 deceased burrowing owls were observed on-site
- Ferruginous Hawk (*Buteo regalis*) – Foraging – FSC/CSC
- Lawrence's Goldfinch (*Carduelis lawrencei*) – Nesting and Foraging – FSC/None
- Lark Sparrow (*Chondestes grammacus*) – Nesting and Foraging – FSC/None
- Northern Harrier (*Circus cyaneus*) – Nesting and Foraging – None/SSC – Observed on-site
- White-tailed Kite (*Elanus leucurus*) – Nesting and Foraging – FSC/SFP – Observed on-site in 2014 surveys
- Loggerhead Shrike (*Lanius ludovicianus*) – Foraging – FSC/SSC.

### Mammals

- Pallid Bat (*Antrozous pallidus*) – Roosting and Foraging – None/SSC
- Western Mastiff Bat (*Eumops perotis californicus*) – Foraging – None/SSC
- Western Yellow Bat (*Lasiurus xanthinus*) – Roosting and Foraging – None/SSC

Ground clearing and removal of vegetation, including shrubs, during Project implementation would result in the direct loss of potential nesting and foraging habitat for the special status wildlife species listed above. There is no potential habitat for threatened or endangered species listed under FESA or CESA. Impacts to the other species listed above would likely not threaten their regional populations; therefore, removal of the habitat would represent an adverse but less than significant impact. Potential direct impacts to Northern Harrier, and other bird species may be avoided by conducting pre-construction nesting bird surveys (see Sections 5.2.2 below). Therefore, with appropriate implementation of the recommended mitigation measures outlined in Section 5 below, no significant impacts to special status wildlife species are expected.

As noted above in Section 3.7.2, there is potential nesting and foraging habitat for Burrowing Owls and 2 deceased owls were found in the southern portion of the Site in early 2016. Based on the current site conditions, the Project will result in the loss of habitat for Burrowing Owl. As noted in Section 1.1 of this report, The Preserve EIR concluded that the loss of Burrowing Owl nesting and foraging habitat was determined to be individually significant at the project level and cumulatively significant at the regional level. The Preserve EIR mitigation measures, which included the preparation of the RMP, addressed the loss of upland wildlife habitat, including habitat for Burrowing Owls. Mitigation measures for the Burrowing Owl are identified in Section 5.2.3 of this report, which are consistent with The Preserve EIR and RMP.

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<sup>2</sup> **Federal/State Status Codes:**

FE = Federally Endangered under Federal Endangered Species Act (FESA)

FT = Federally Threatened under Federal Endangered Species Act (FESA)

CE = Endangered in California under California Endangered Species Act (CESA)

CT = Threatened in California under California Endangered Species Act (CESA)

FSC = Federal Species of Special Concern

SSC = Species of Special Concern in California

#### 4.5 Wildlife Movement and Nursery Sites

Projects should be designed to maximize the potential for wildlife movement and to minimize impacts to wildlife corridors. Consideration of these impacts is typically required in the review of projects under existing state and federal regulations. Wildlife corridors connect large patches of natural open space and provide routes for the migration of animals. They contribute to the viability of species' populations by allowing the exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing avenues for re-colonization of habitat after local extirpation or ecological catastrophes (e.g., fires) (Dudek, 2003-b). Nursery sites may be a grove of trees, cave, cliff, or even man-made structures, such as box culverts and bridges, which are used for rearing young or roosting. Solitary and colonial species, such as raptors, swallows, and bats, may return to the same nesting sites year after year.

As noted in The Preserve EIR (Chino, 2003), there are no wildlife movement corridors in the northern half of Subarea 2 above the 566-foot inundation line (in which the Site is located). Much of the land within the City has been converted from agricultural land and open space to commercial, industrial, residential, and recreational uses. The existing conditions of The Preserve provide very limited wildlife habitat value due to the general lack of native vegetation as well as extensive past and present human development and agricultural activities which have resulted in significant alterations to topography, vegetation, species assemblages, and habitat quality. Regional wildlife movement is severely restricted due to the highly urbanized nature of the City and the greater San Bernardino County area. Areas of native habitat have been fragmented by urbanization and wildlife habitats are isolated. The Chino Expressway (SR-71) and Euclid Avenue (SR-83), along with other arterial roadways (e.g., Pine and Kimball Avenue), present significant barriers to wildlife dispersion. Physical barriers (e.g., structures, fences, etc.) along with roads, traffic noise, motion, and increased night-time light impacts severely limit wildlife movement. In general terms, wildlife movement is difficult and unlikely in the more developed and disturbed portions of The Preserve. Wildlife movement is predominantly limited to opportunistic species that are common, widely distributed, and adapted to living in proximity to human development (e.g., Coyote, Raccoon, Striped Skunk, Virginia Opossum, etc.). Further restricting wildlife movement and foraging patterns within these areas is the presence of domestic dogs and cats.

In summary, there are no native vegetation communities on-site and the Site does not serve as a regional wildlife corridor. Therefore, the proposed Project will not contribute to habitat fragmentation or restriction of wildlife movement in the area. Given the constraints to movement, the nature of the surrounding areas, and the fact that The Preserve does not connect two larger intact natural habitats, impacts of the proposed Project to wildlife movement through the Site would be less than significant.

Additionally, no indications of nursery sites were observed during the field investigation. The Site does not contain any streams that support fish or other aquatic species. Therefore, implementation of the proposed Project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors. Also, since native wildlife nursery sites are not present on-site, no impacts to these resources would occur.

#### 4.6 Cumulative Impacts

Cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The intended

purpose of the proposed Project is the development of business park, light industrial, and warehouse land uses to serve the City of Chino and southwestern San Bernardino County. The Project will help meet the demand for business, industrial, and warehouse space in the City and County. Public benefits include employment opportunities, an increase in the local tax base, and a long-term economic benefit to the surrounding community. The Project is an infill development and is typical of other activities in the region. Most of the properties in the vicinity are developed or zoned for future development, and development will likely occur at those parcels regardless of development of the proposed Project.

As noted in the previous subsection, the existing conditions of The Preserve provide very limited habitat value due to extensive past and present human and agricultural activities which have resulted in significant environmental alterations. However, in the absence of mitigation, cumulative development of The Preserve may result in potentially significant cumulatively considerable impacts within the City's SOI area and the region. As stated in Section 5.4.4 of The Preserve EIR, the loss of open space and agricultural lands will not have a direct impact on any federal or state listed species occurring within The Preserve or within the region as a whole. All listed species occur below the 566-foot elevation line and, therefore, occur in an area that will not be subject to urban development (Chino, 2003). The primary effects of development of The Preserve, when considered with other projects in the region, would be the cumulative direct loss of agricultural lands that contain open space, habitat for plants and wildlife including migratory birds and waterfowl, vegetation associations important to raptor foraging, and potential habitat for sensitive or special-status wildlife species. Specifically, present and probable future projects in the vicinity are anticipated to permanently remove plant and wildlife resources within development areas. Although habitat within agricultural areas is of substantially reduced quality than that which is found in natural areas, it still may provide open spaces for foraging, refuge, and areas of limited disturbance that can be utilized for reproduction. Project construction will contribute to the incremental loss of undeveloped land in the region. Other cumulative impacts potentially include greater limitations on wildlife movement, increased edge effects, reduced habitat quality, and increased wildlife mortality.

Potential direct cumulative impacts to special-status wildlife species could include nest abandonment by adult Burrowing Owls and/or direct mortality to owl chicks from increased human and pet presence within the area or from direct habitat removal; raptor nest abandonment as a result of increased pedestrian traffic or nesting site removal; disruption of raptor foraging patterns caused by increased human presence and loss of foraging habitat; erosion of wildlife species diversity through time from chronic human presence and noise; increased wildlife mortality from feral cat and dog predation; disturbance of wildlife foraging patterns due to feral cat and dog predation on their prey base; or direct removal of habitat. Cumulative indirect impacts to plants and wildlife would include any form of habitat degradation resulting from human-caused disturbances. This could include the proliferation of non-native invasive species or pollution of surface water runoff. Cumulative natural resource changes and stresses resulting from the Project may include the ongoing extraction of water and associated lowering of groundwater tables; increased air pollution; an increase in impervious surfaces within the watershed, which would lead to greater urban runoff entering the stream systems in the watershed; and a continued need to conduct flood risk management activities to protect existing residential, commercial, or institutional developments.

To offset potentially significant cumulative impacts, the proposed Project shall comply with applicable mitigation measures outlined in The Preserve EIR. A discussion of recommended Project-specific mitigation measures is provided in Section 5 below. Impacts related to build-out of the City

are anticipated to be less than significant if projects comply with the City's General Plan, The Preserve Plan and RMP policies, mitigation measures, and standard conditions.

The Site is not within any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or any other approved local, regional, or State habitat conservation plan. Therefore, implementation of the proposed Project would not conflict with the provisions of any such adopted plan. Based on the assessment of biological resources provided herein, and when considered in the context of other past, current and future projects in the City and the County, adverse cumulative effects to regional biological resources as a result of implementing the proposed Project are expected to be less than significant with implementation of mitigation measures.

## **5. Recommended Mitigation Measures**

Section 5.4 of The Preserve EIR outlines relevant environmental policies and regulations, applicable Specific Plan goals and policies, thresholds of significance, potential impacts of implementing the Plan, and mitigation measures related to biological resources in The Preserve. Recommended Project-specific mitigation measures are outlined in the following subsections. These measures are not exhaustive; the focus is on measures designed to avoid or minimize potentially significant impacts to biological resources. Proposed development projects in the City should also be designed to avoid or minimize adverse impacts to resources from lighting, noise, trash/debris, urban and stormwater runoff, toxic materials, invasive non-native plants, domesticated and feral animals, dust, trampling, and unauthorized recreational use (including off-highway vehicle use). The Project applicant (Applicant) will be responsible to comply with all mitigation measures required by the City. If the following mitigation measures are implemented, no potentially significant impacts to biological resources are anticipated as a result of proposed Project implementation.

### **5.1 Vegetation**

No native vegetation communities, including sensitive communities, are present on-site and thus no impacts are expected. There are no oak trees or windrows, or wetland, riparian, riverine, or vernal pool habitats on-site. Therefore no mitigation measures for direct impacts to vegetation communities are recommended.

### **5.2 Wildlife**

#### **5.2.1 Endangered and/or Threatened Species**

There are no State or Federally listed endangered or threatened species protected by FESA or CESA listings found on the Site or expected to occur.

#### **5.2.2 Nesting Birds**

Ground clearing and removal of vegetation, as well as removal of on-site structures, during Project implementation would result in the direct loss of potential nesting and foraging habitat for the special status bird species listed in Section 4.5.3. Impacts to nesting birds as a result of Project implementation would be considered a significant impact since disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act. Additionally, nests and eggs are protected under Fish and Game Code Section 3503. The removal of vegetation and ground clearing has the potential to result in a significant impact to nesting birds during the avian nesting season (February 1 through August 31). Therefore, if feasible, vegetation removal and ground clearing activities should be scheduled for outside the nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation removal, soil disturbance, or any other

construction related activity is to occur during the nesting season, a pre-construction nesting bird survey shall be conducted by a qualified wildlife biologist (biologist) prior to initiation of construction. The following mitigation measures are recommended to avoid direct impacts any to birds that may be nesting at the Site:

- To ensure that avian Species of Concern, protected migratory species (e.g., Migratory Bird Treaty Act), or raptor species are not injured or disturbed by construction in the vicinity of nesting habitat, the Applicant shall implement the following measures:

When feasible, all ground clearing, tree and vegetation removal, and demolition of existing structures shall occur between September 1 and January 31 to avoid the breeding season of any bird species that could be using the area, and to discourage birds from nesting in the vicinity of an upcoming construction area. This period may be modified with the authorization of CDFW; or if it is not feasible to initiate construction outside this window then, prior to the beginning of mass grading, including grading for major infrastructure improvements, during the period between February 1 and August 31, the entire Site and areas within 250 feet of any grading or earthmoving activity (including the ground, vegetation, and structures) shall be surveyed for active bird nests or Burrowing Owl burrows by a qualified biologist no more than 14 days prior to disturbance. If active nests or burrows are found, and the nest or burrow site is within 250 feet of potential construction activity, a fence shall be erected around the nest, tree, or burrow(s) at a distance of up to 500 feet, depending on the species, from the nest, burrow, or edge of the tree canopy or structure to prevent construction disturbance and intrusions on the nest area. The appropriate buffer shall be determined by the City in consultation with CDFW.

- No construction vehicles shall be permitted within restricted areas (i.e., bird protection zones), unless directly related to the management or protection of the legally protected species.
- In the event that a nest is abandoned, despite efforts to minimize disturbance, and if the nestlings are still alive, the Applicant shall contact CDFW and, subject to CDFW approval, fund the recovery and hacking (controlled release of captive reared young) of the nestling(s).
- If a legally protected species nest is located in a tree designated for removal, the removal shall be deferred until after August 31, or until the adults and young of the year are no longer dependent on the nest site as determined by a qualified biologist.
- Once the nest cycle is complete and all nestlings have fledged and left the nest (or the nest has failed), then construction in the area could resume.
- A biologist shall be present on-site to monitor vegetation removal activities to ensure that any nests not detected during the initial survey are not disturbed.
- If initial ground disturbing activities or site clearing is proposed to occur outside of the nesting season (September 1 through January 31), then a pre-construction survey would not be required and construction could commence unimpeded.

### 5.2.3 Burrowing Owl

As noted above, the proposed Project will result in the loss of habitat for Burrowing Owls, including currently occupied burrows. Based on focused Burrowing Owl surveys conducted in from October 2015 through July 2017, the Project will affect at least one pair of Burrowing Owls. The Preserve EIR mitigation monitoring program and the RMP Burrowing Owl Mitigation Checklist identify measures for individual projects within the Preserve

Specific Plan area to mitigate the impacts to Burrowing Owls, including the relocation of Burrowing Owls when avoidance is not feasible. The following mitigation measures shall apply to the proposed Project in order to eliminate or reduce potentially significant impacts to Burrowing Owls to a level that is less than significant. A qualified wildlife biologist experienced in Burrowing Owl ecology, surveys, monitoring, and mitigation should coordinate with CDFW on behalf of the Applicant to implement these mitigation measures. If feasible, all construction activities, including vegetation removal and ground clearing, should be scheduled for outside the nesting season (February 1 through August 31).

#### Pre-construction Survey

A pre-construction survey shall be required no less than 14 days prior to initiation of construction, including any vegetation removal, soil disturbance, or any other construction-related activity. The survey shall be conducted by a qualified wildlife biologist. If construction activities are delayed or suspended for more than 14 days after the pre-construction survey, the Site shall be re-surveyed for Burrowing Owl.

If Burrowing Owl are not detected during the pre-construction survey, then no further mitigation would be required. If Burrowing Owl are detected during the pre-construction survey, all construction activities that may disrupt the owls will be required to follow CDFW's most current Burrowing Owl avoidance and burrow exclusion protocols. These protocols may include the following measures [Please note that these measures differ from those specifically outlined in The Preserve EIR Mitigation Measure 3 which was developed in 2003; at this time, CDFW currently promotes burrow exclusion over Burrowing Owl relocation and artificial nests. The City and biologist should coordinate with CDFW on behalf of the Applicant to develop and implement appropriate mitigation measures.].

#### Avoidance During the Breeding Season

Breeding season avoidance measures, including but not limited to those listed below, should be implemented.

- If construction activities are scheduled during the breeding season (February 1 through August 31), a pre-construction survey for resident Burrowing Owl should be conducted by the qualified biologist no less than 14 days prior to construction activities. If construction activities are delayed or suspended for more than 14 days after the pre-construction survey, the Site shall be re-surveyed for Burrowing Owl. Pre-construction survey methodology should be based on Appendix D of the CDFW Burrowing Owl Staff Report (CDFG, 2012). Results of the pre-construction survey shall be provided to CDFW and the City.
- If Burrowing Owl are not detected during the pre-construction survey, then no further mitigation would be required.
- If Burrowing Owl are found to be utilizing the Site during the pre-construction survey, measures should be developed by the biologist in coordination with CDFW and the City to avoid impacting owls and occupied burrows during the nesting period. These measures shall be based on the most current CDFW protocols and would minimally include establishment of buffer setbacks from occupied burrows as well as additional owl surveys, monitoring, and reporting.

#### Burrow Exclusion and/or Closure During the Non-breeding Season

If burrows occupied by migratory or non-migratory Burrowing Owl are detected during the pre-construction survey within the non-breeding season (September 1 through January 31), then burrow



exclusion and/or closure may be used to exclude owls from those burrows. Burrow exclusion and/or closure should only be conducted by a qualified biologist in coordination with CDFW using the most current CDFW guidelines. .

### **5.3 Mitigation Fee**

In accordance with Mitigation Measure 8 in the Preserve EIR, a mitigation fee will be imposed on new development for the purpose of implementing the Biological Resource mitigation measures as described in the RMP. The Applicant shall be required to pay a mitigation fee to the City of Chino within 5 days of project approval, or as specified in the Conditions of Approval.

## **6. Summary**

### **Special Status Species**

With appropriate implementation of the mitigation measures outlined in Section 5 of this report, potential adverse impacts to special status species would be less than significant. The proposed Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

### **Riparian Habitat and/or Sensitive Natural Communities**

As described in Sections 3.5, 4.4, and 4.4.2, there are no riparian habitats and no sensitive natural communities at the Site. The proposed Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

### **Jurisdictional Wetlands**

No jurisdictional waters or wetlands are present at the Site, as described in Sections 3.5 and 4.3. The proposed Project would not have a substantial adverse effect on any waters or wetlands subject to regulation by the Corps, RWQCB, and/or CDFW. No impacts to wetland plant or animal species are anticipated as a result of Project implementation.

### **Wildlife Movement**

As described in Section 4.5, the proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

### **Biological Resource Policies**

The proposed Project would not conflict with any local policies or ordinances protecting biological resources.

### **Habitat Conservation Plans/Natural Community Conservation Plans**

As discussed in Section 4.6, the Site is not within any Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan areas. The proposed Project would not conflict with the provisions of any such plans.

### **Cumulative Impacts**

As described in Section 4.6, the proposed Project is an infill development and impacts related to build-out of the City are anticipated to be less than significant assuming compliance with General Plan and The Preserve Specific Plan policies and existing standard conditions. The Applicant shall be required to pay a mitigation fee which is intended to reduce potentially significant cumulative impacts to overwintering/migratory birds and raptor nesting and foraging habitat (including Burrowing Owl). With appropriate implementation of the mitigation measures outlined in Section 5, cumulative impacts to biological resources in the region are expected to be less than significant.

### **7. Report Certification**

I hereby certify that the statements and information presented herein and in the attached exhibits are true and correct to the best of my knowledge and belief.

DATE: August 31, 2018

SIGNED:

  
Michael J. Klinefelter

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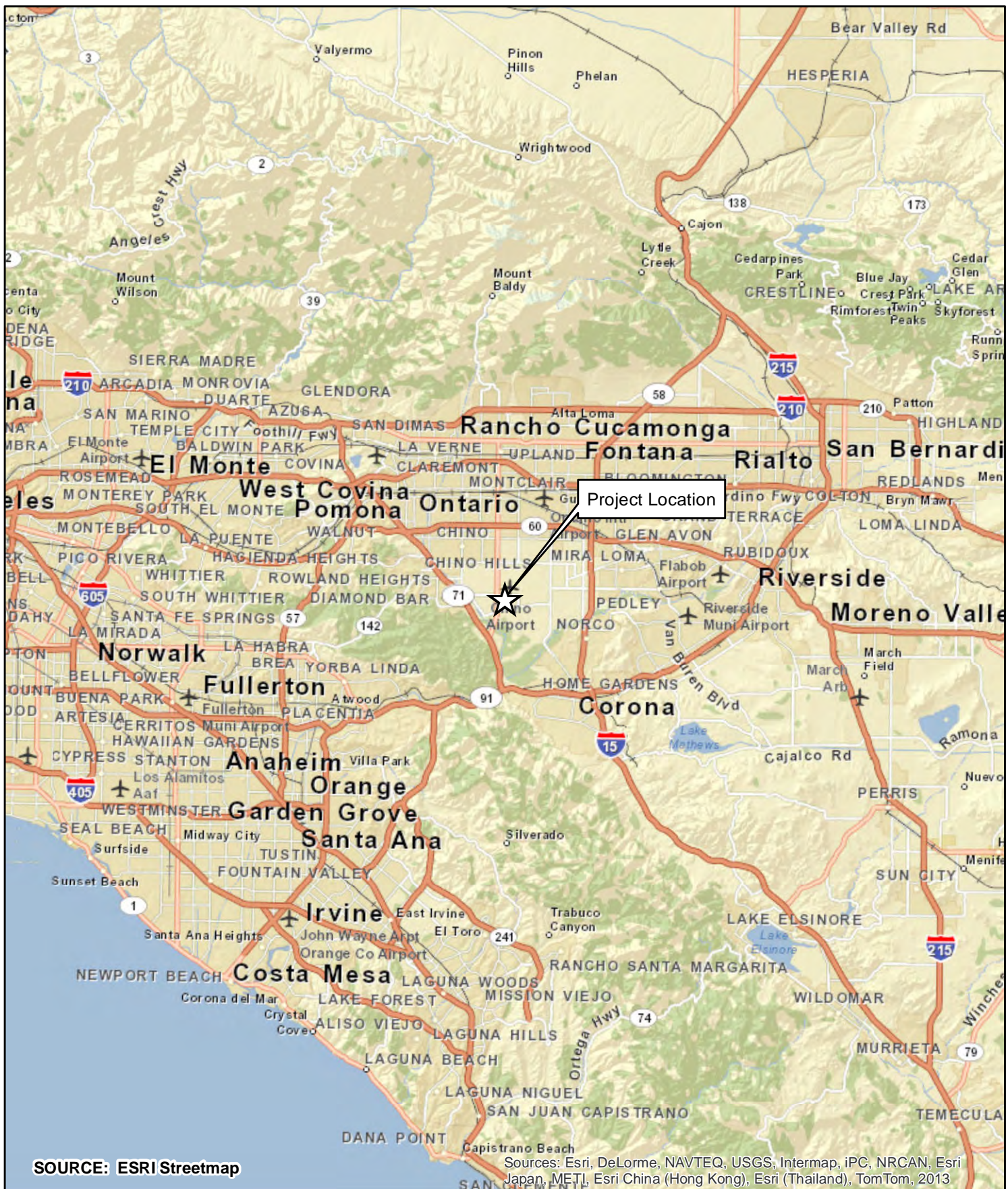
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# **APPENDIX A**

## **Map Figures**

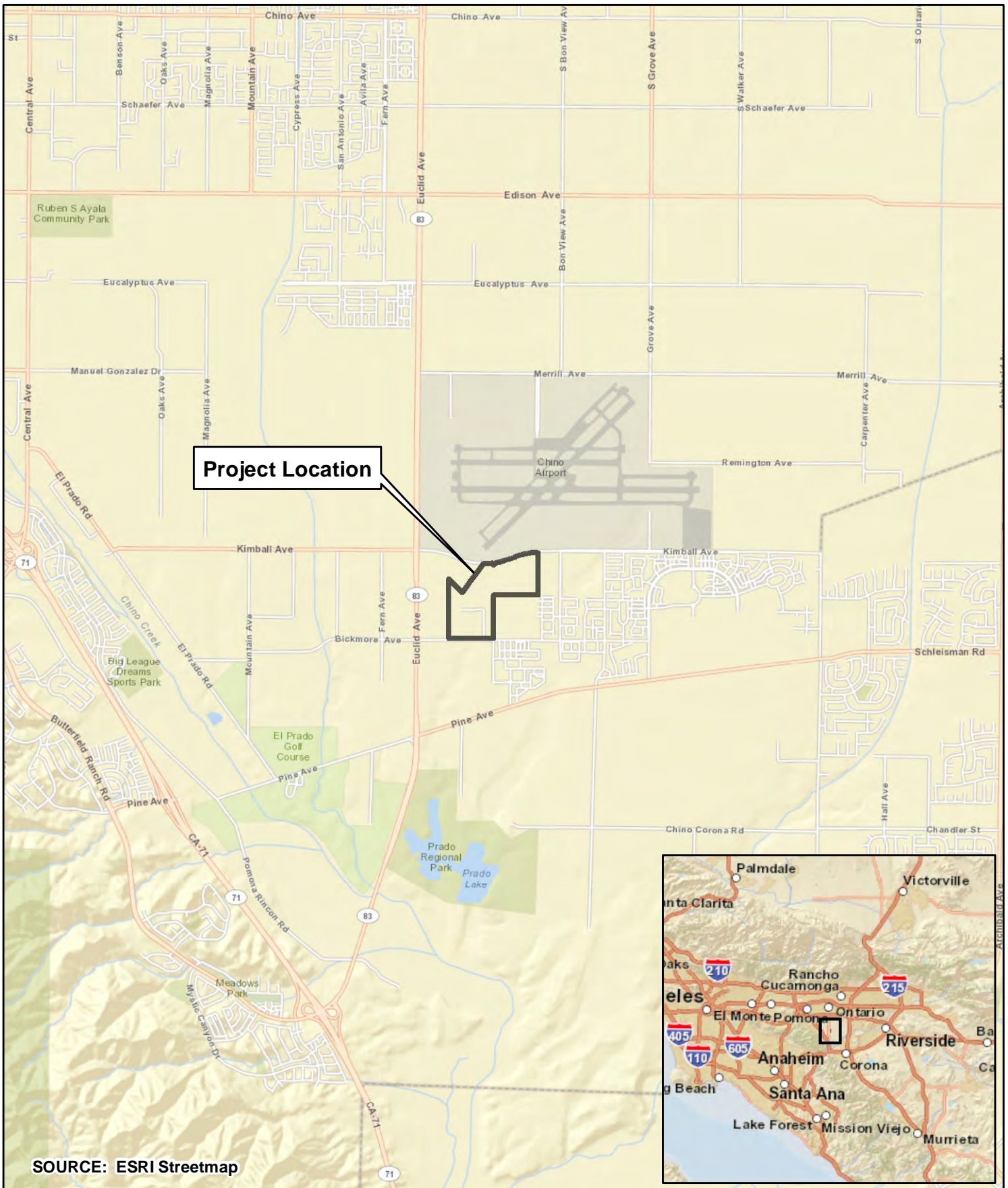




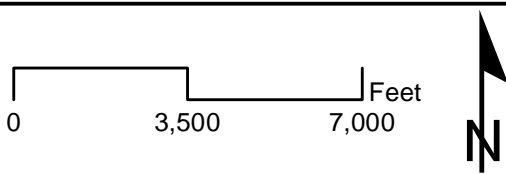
<p><b>M.J. Klinefelter</b> GIS &amp; ENVIRONMENTAL CONSULTING</p> <p>40960 CALIFORNIA OAKS RD #316 MURRIETA, CALIFORNIA 92562 PH (951) 698-8314</p>	<p>0 8 16 Miles</p> <p>N</p>	<p>TITLE <b>REGIONAL MAP</b></p> <p>PROJECT <b>Altitude Business Centre</b> Chino, CA</p>	<p>FIGURE <b>1</b></p>
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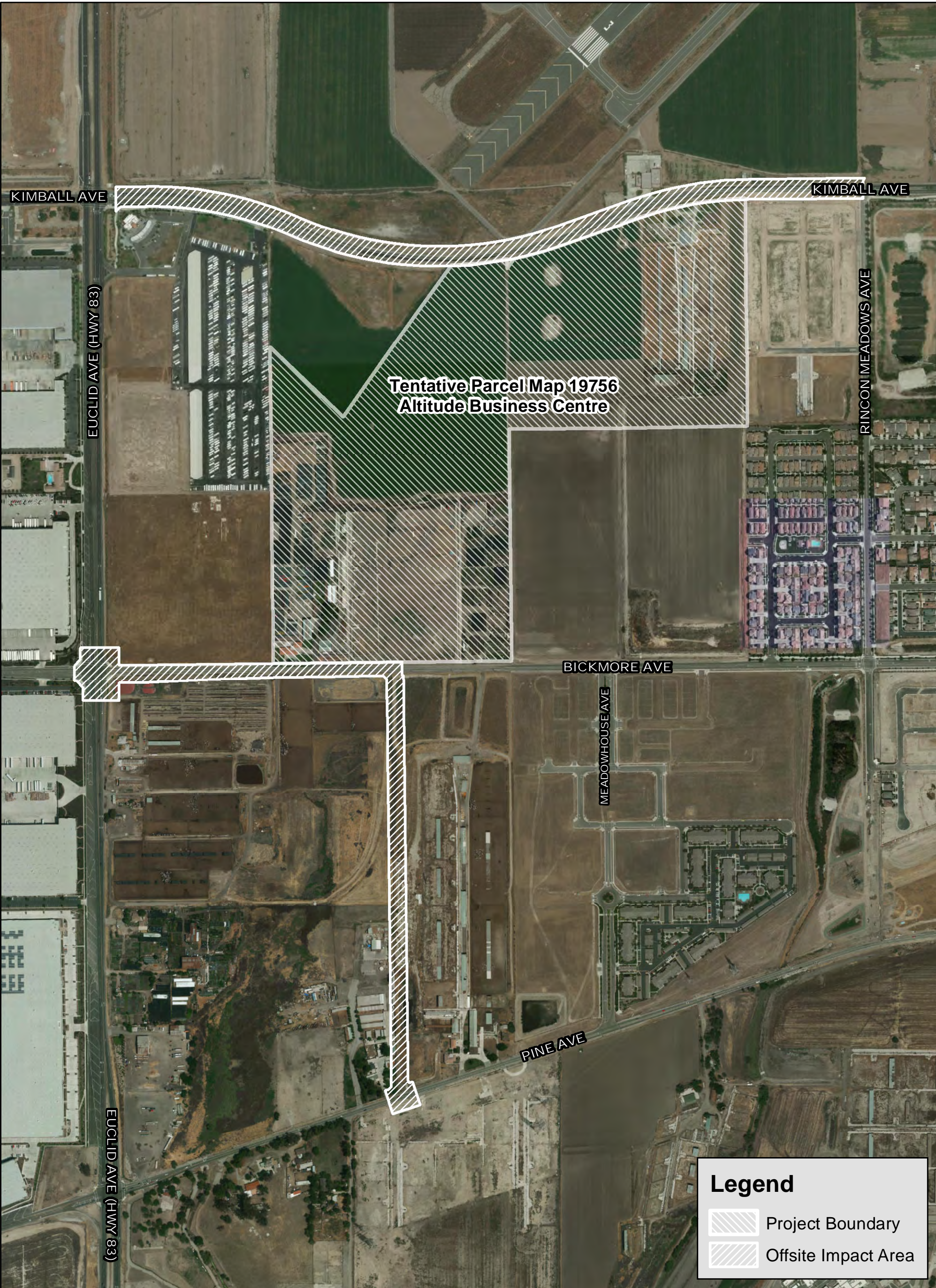


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 VICINITY MAP

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 Altitude Business  
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 Chino, CA

**FIGURE**  
**2**


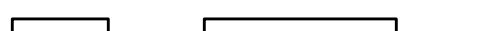




Legend

Project Boundary

Offsite Impact Area

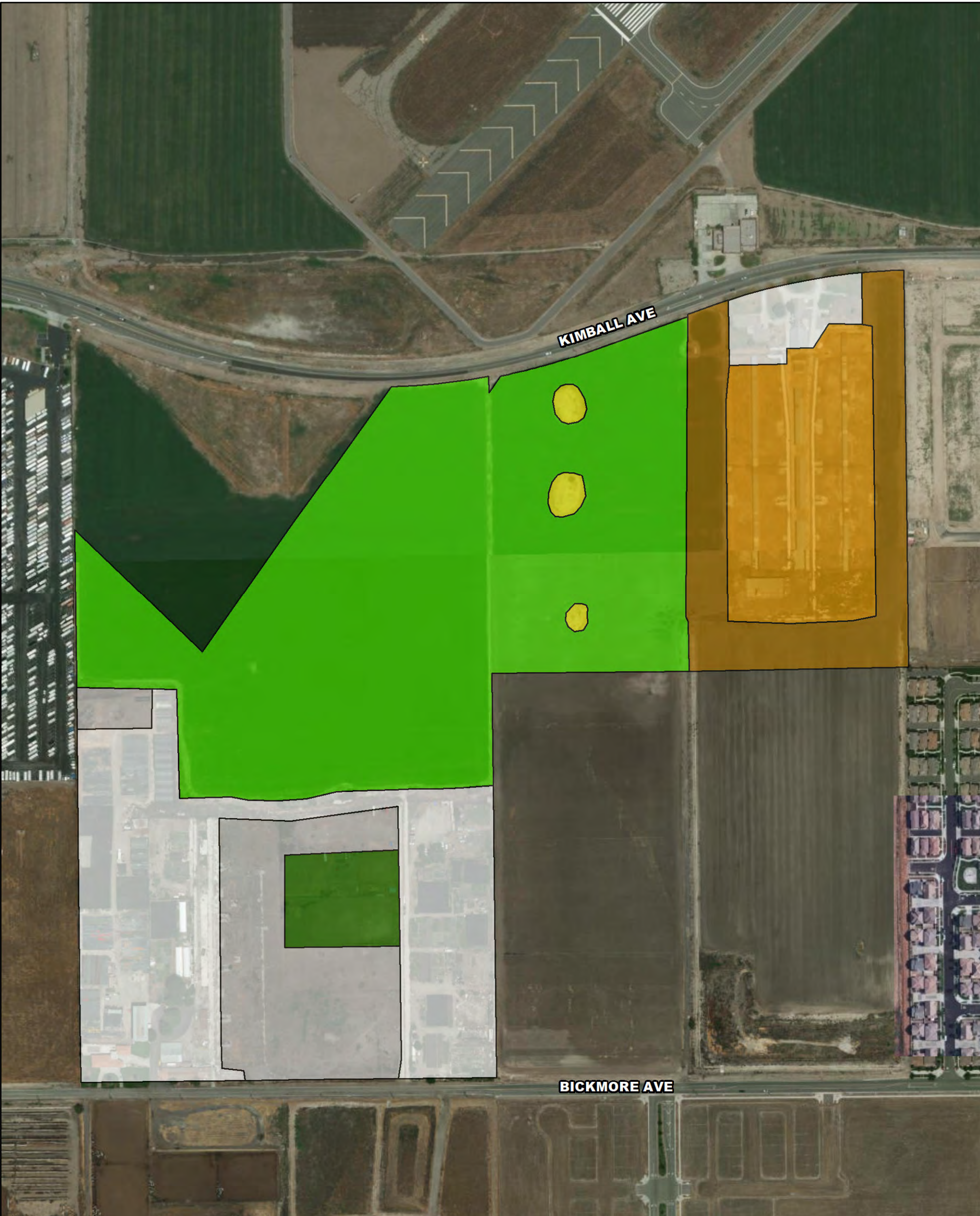
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<div>4</div> <div>FIGURE</div>	<div>M.J. Klinefelter</div> <div>GIS &amp; ENVIRONMENTAL CONSULTING</div> <div>40960 CALIFORNIA OAKS RD #316</div> <div>MURRIETA, CALIFORNIA 92562</div> <div>PH (951) 698-8374</div>	<div><div><div></div></div><div>NORTH</div></div> <div>SCALE1:3600</div> <div>DATE5/17/2018</div>	<div><div><div></div></div><div>0150300600</div><div>Feet</div></div> <div>PROJECTAltitude Business Centre</div>	<div>TITLEAERIAL PHOTO AND SITE MAP</div>
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Legend

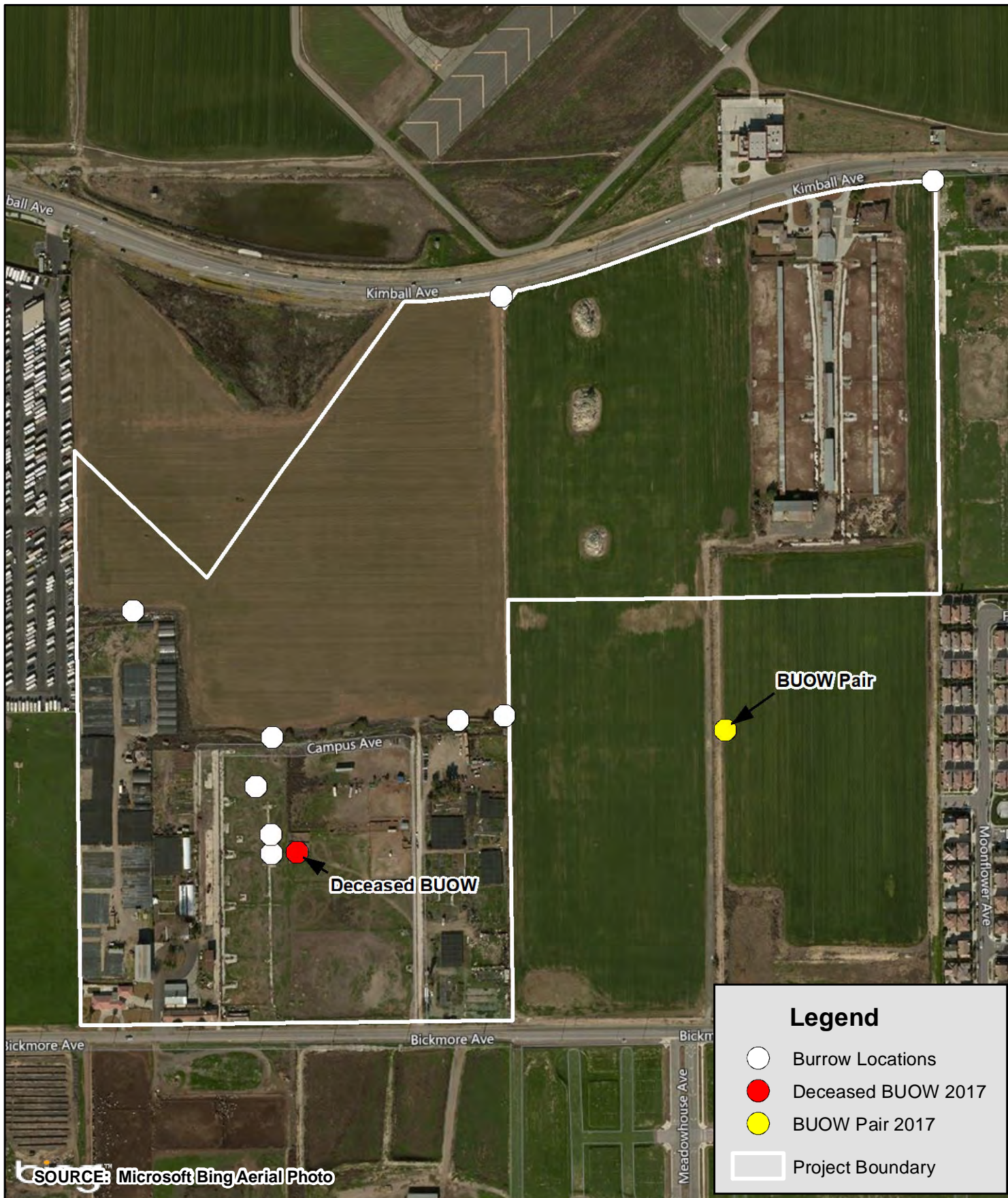
- AG-Active (39.0 Ac)
- AG-Fallow (8.1 Ac)
- Concrete (0.7 Ac)
- Disturbed (9.0 Ac)
- AG-Dairy (9.4 Ac)
- AG-Pasture (2.5 Ac)
- Developed (20.4 Ac)

<div>5</div> <div>FIGURE</div>	<div>M.J. Klinefelter</div> <div>GIS &amp; ENVIRONMENTAL CONSULTING</div> <div>40960 CALIFORNIA OAKS RD #316</div> <div>MURRIETA, CALIFORNIA 92562</div> <div>PH (951) 698-8374</div>	<div><div></div><div>NORTH</div></div> <div>SCALE1:3600</div> <div>DATE5/17/2018</div>	<div><div></div><div>Feet</div><div>0150300600</div></div> <div>PROJECT</div> <div>Altitude Business Centre</div>	<div>TITLE</div> <div>VEGETATION AND LAND USE MAP</div> <div>Base Map Source: BING online aerial, MJK Survey</div>
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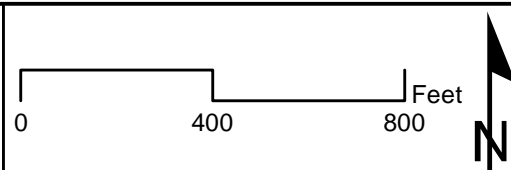






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DATE 5/17/2018

TITLE  
**BURROW LOCATIONS**  
 PROJECT  
**Altitude Business Centre**  
 Chino, CA





<div>8</div> <div>FIGURE</div>	<div>M.J. Klinefelter</div> <div>GIS &amp; ENVIRONMENTAL CONSULTING</div> <div>40960 CALIFORNIA OAKS RD #316</div> <div>MURRIETA, CALIFORNIA 92562</div> <div>PH (951) 698-8374</div>	<div><div></div><div>NORTH</div></div> <div>SCALE</div> <div>1:3600</div> <div>DATE</div> <div>5/17/2018</div>	<div><div>0150300600</div><div>Feet</div></div> <div>PROJECT</div> <div>Altitude Business Centre</div> <div>CHINO, CA</div>	<div>TITLE</div> <div>IMPACT MAP</div> <div>Base Map Source:ProActive Engineering TPM 19756</div>



## **APPENDIX B**

### **Special Status Plant Surveys For The Altitude Business Centre Project**

**SPECIAL STATUS PLANT SURVEYS  
FOR THE  
ALTITUDE BUSINESS CENTRE**

**Prepared for:**

Michael Klinefelter  
40960 California Oaks Road # 316  
Murrieta CA 92562

**Prepared by:**

David Bramlet  
D.Bramlet, Consulting Biologist  
1691 Mesa Dr. No. P-4  
Newport Beach CA 92660  
714-549-0647

August 2017

## **SECTION 1.0 INTRODUCTION**

### **1.1 Project Location**

The proposed Altitude Business Centre (T&B Planning 2017) is comprised of eight parcels (APNs 1056-101-02, 1056-111-03, 1056-121-01, 1055-231-01, 1055-231-02, 1055-541-01, 1055-541-02, 1055-241-06, 1055-241-07) in the City of Chino, in San Bernardino County, see Figures 1 and 2. The total area of these parcels is roughly 89.1 acres. The property is located south of Kimball Ave., north of Brickmore Ave., east of Euclid Ave., and west of Moon Flower Avenue. These parcels are located just south of the Chino airport.

The parcels are located on the Prado Dam 7.5' USGS topographic map, at T2S R7W in Section 29, and the UTM coordinates for this property are 11S 04 40 366mE X 37 58 407mN for the western parcels and 04 40 914mE X 37 58 411mN for the eastern parcels, see Figure 3. An aerial photograph, noting the boundaries of the parcels is noted in Figure 4. The elevation of the property ranges from 600 to 574 ft. above mean sea level.

### **1.2 Previous Reports and Current Study**

A biological resources assessment of the proposed Richland Business Center parcels project was prepared in 2015 (Klinefelter 2015). This study documented the existing biological resources on these properties including vegetation, wildlife, soils, and the presence of any jurisdictional waters or wetlands. The report also noted the potential impacts to these resources from the development of the proposed project and proposed a series of mitigation measures to compensate for these impacts. A survey on the 33.4 acre parcel APN 1055-241-06 was conducted in 2012 (True 2012).

The mitigation proposed in this report recommended focused botanical surveys for at least two potentially occurring species status plant species known from the study area. Therefore, focused botanical surveys were performed on the Richland parcels in 2016 (Bramlet 2016). The currently proposed development, the Altitude Business Centre (T&B Planning 2017) has a slightly different configuration, than the Richland Business Center and includes parcel APN 1055-241-06 that was not examined in the 2016 botanical survey.

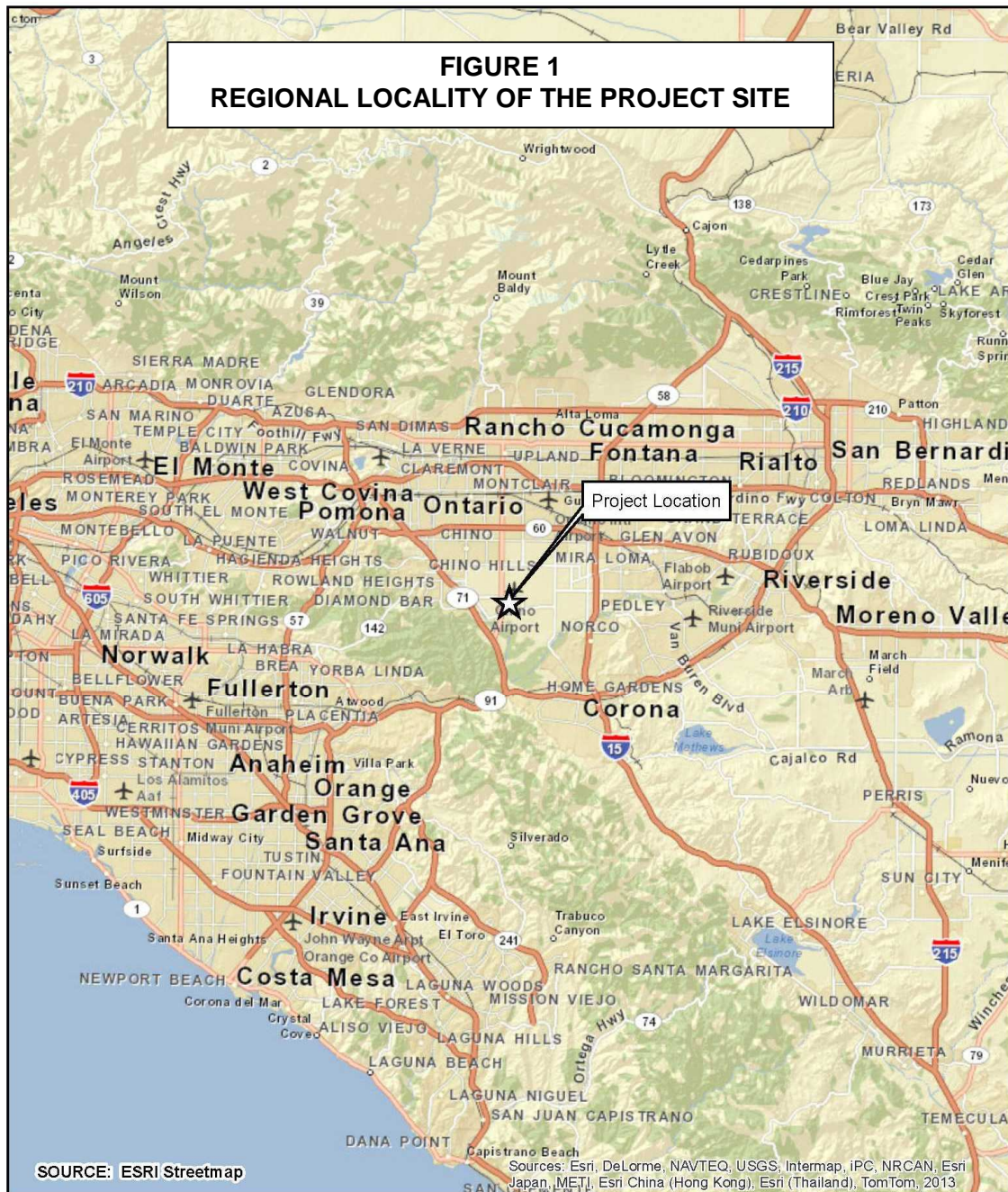
Therefore, botanical studies were conducted in the late spring-summer of 2017 that concentrated on APN 1055-241-06, but also re-examined the other parcels within the proposed development. This report incorporates the information on the plant communities, and soils that were presented in the previous studies (Klinefelter 2015, True 2012), along with the maps from these studies and the initial study (T&B Planning 2017). The observations from the 2016 survey of this locality (Bramlet 2016), have also been incorporated into this report.

### **1.3 Project Description**

The eight parcels were previously active agricultural lands or active dairies. Currently, the northern area of the property contains area of active agricultural production and an old dairy site. Two nurseries, and other businesses are now located in one of the old dairy sites in the southwest corner of the project site. The other dairy site in the northeast corner is now abandoned, although the houses are still occupied, and active agricultural areas are located south and east of the old corrals.

The Altitude Business Centre will consist of a new business center in the western and northern portions of the project site (T&B Planning 2017) and would also include the central parcel (APN 1055-241-06) that was addressed in the 2012 biological assessment (True 2012), but was not considered in the previous development proposed for this locality (Klinefelter 2015).

The proposed project will develop 72.9 acres of the 89.1 acre site, leaving some 16.2 acres of open space. The development will be comprised of up to twenty five commercial buildings. A street will be developed through the center of the property (Mayhew Ave.), and three detention basins are proposed to contain drainage from the site (T&B Planning 2017).



<b>M.J. Klinefelter</b> GIS & ENVIRONMENTAL CONSULTING 40960 CALIFORNIA OAKS RD #316 MURRIETA, CALIFORNIA 92562 PH (951) 698-8314	0 8 16 Miles 	TITLE <b>REGIONAL MAP</b> PROJECT <b>Chino Business Center</b> Chino, CA	FIGURE <b>1</b>
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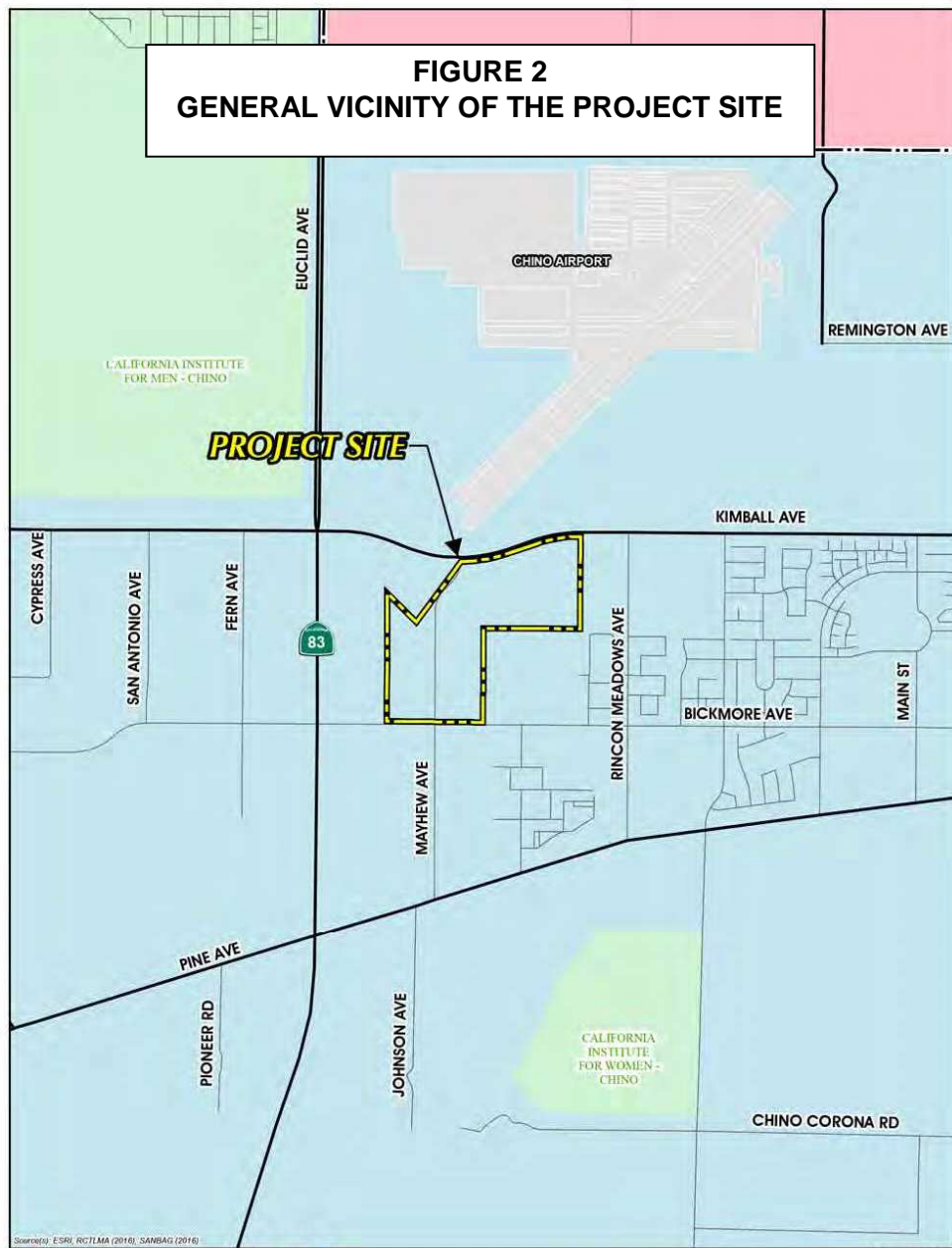


Figure 2-2



Altitude Business Centre

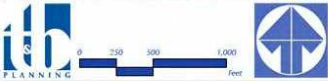
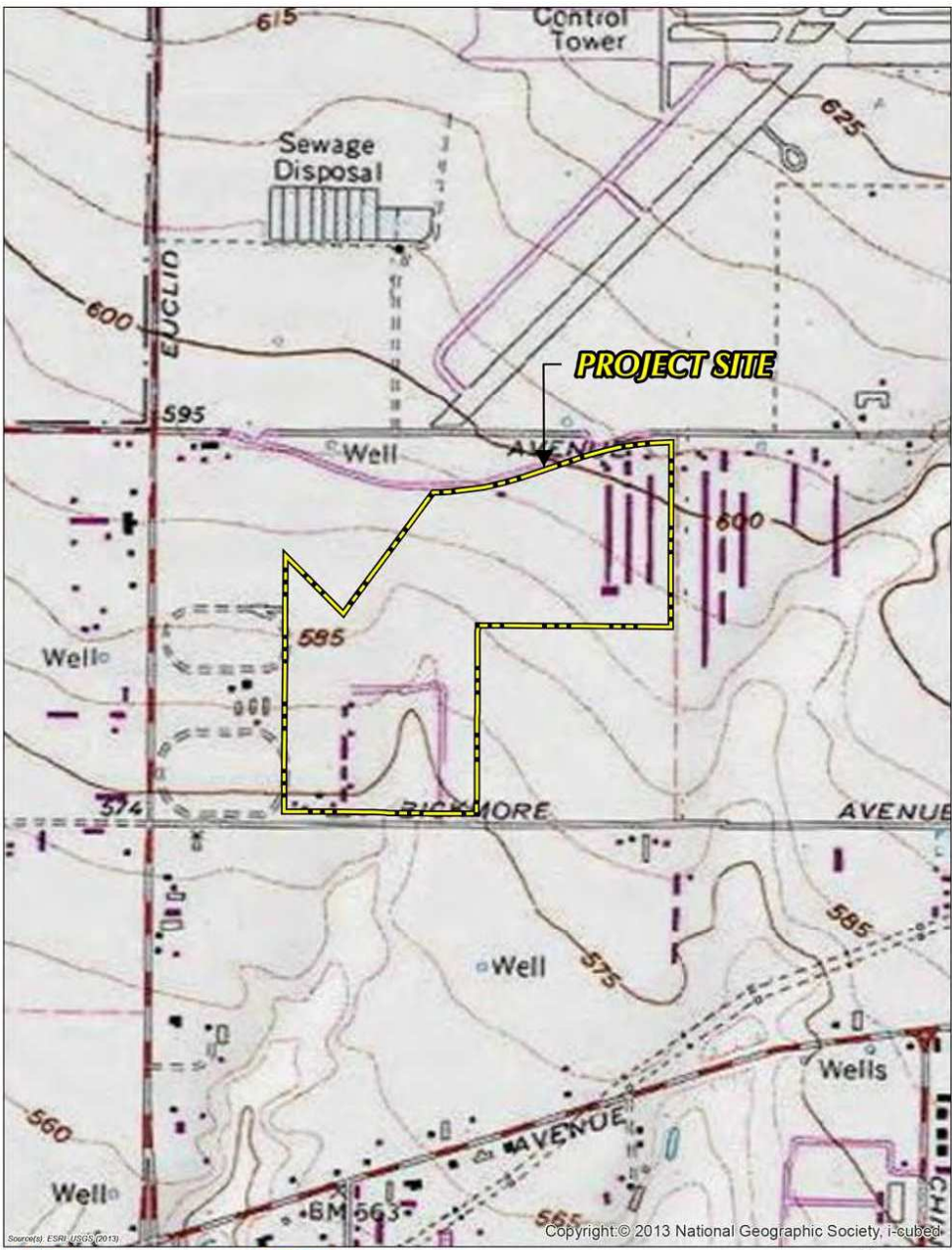
CEQA Initial Study

**VICINITY MAP**

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FIGURE 3  
TOPOGRAPHIC MAP OF THE PROJECT SITE



Altitude Business Centre  
CEQA Initial Study

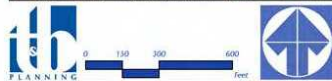
USGS TOPOGRAPHIC MAP

Figure 2-3

**FIGURE 4  
AERIAL PHOTO OF THE PROJECT SITE**



Figure 2-4



Altitude Business Centre

CEQA Initial Study

**AERIAL PHOTOGRAPH**

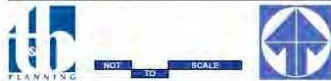
9



**FIGURE 5  
PROPOSED DEVELOPMENT PLAN**



Figure 2-7



Altitude Business Centre  
CEQA Initial Study

**MASTER SITE APPROVAL PL16-0457**

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## SECTION 2.0 METHODS

### 2.1 Literature Review

A review of the existing literature was conducted to determine any descriptions of existing habitats within the study and the potential presence of any special status plant and animal species. Sources reviewed for this study included:

- CNDDDB Rarefind database of special status species and habitats for the Prado Dam, Corona North, Ontario, and Guasti 7.5' quadrangles (CDFW 2017a);
- CNPS Rare Plant Inventory for the Prado Dam, Corona North, Ontario, and Guasti 7.5' quadrangles (CNPS 2017);
- Documented plant collections from the Consortium of California Herbaria for the study area (Consortium 2017);
- Information on the lucky morning glory (*Calystegia felix*) (Provance and Sanders 2013), smooth tarplant (*Centromadia pungens* ssp. *laevis*), paniculate tarplant (*Deiandra paniculata*), Robinson's pepper grass (*Leipidum virginicum* var. *robinsonii*), and southern California black walnut (*Juglans californica*);
- Biological/Botanical Resources Assessments of the project site (Bramlet 2016, Klinefelter 2015, True 2012);
- Biological surveys conducted within or in the vicinity of the project site (FCS 2013; Harmsworth 2015, Klinefelter 2012, Lukos 2007a, 2007b, 2013a, 2013b, 2015; MBA 2003a, 2003b; Zembal 1985); and
- NRCS (2016) soil maps for the study corridor.

### 2.2 Field Surveys

Field studies were conducted by David Bramlet, botanist and the site examinations were conducted on: 30 May 2017 from 07:30 to 14:00 hours, and on 28 June 2017 from 6:50 to 12:15 hours. The property was examined on foot and the site examination concentrated on the Central parcel of the project site.

The survey examined the Central parcel on foot, to determine the existing plant species within the existing alfalfa field, and adjacent corn field. The remaining parcels were generally reviewed, to determine any potential changes in the habitats from the 2016 surveys.

Field notes were taken to record all plant species observed during the field survey, and photographs were taken to document the existing conditions on these properties. A track log was maintained, using a GPS receiver (Garmin 62S), to note all of the areas examined on the project site. In addition, waypoints were recorded for specific features noted during these surveys.

One of the more likely special status plant species to occur on the project site is the lucky morning glory, which was described in 2013 (Provance and Sanders 2013). This morning glory superficially resembles the common field bindweed (*Convolvulus arvensis*).

Therefore, the main field characters to separate the two species were reviewed. The placement of the bracts was the principal character used to identify the field bindweed during the field surveys and these are located below the flower on the field bindweed. Initially, bindweed was collected, photographed and the waypoints were used to note their localities. Following confirmation that all of the material observed was the field bindweed, the following surveys simply checked the locality of the bracts, to confirm that the all of the material was the field bindweed.

Scientific and common names presented in the text, generally follow the Vascular Plants of western Riverside County: An annotated checklist (Roberts et al. 2004). Although some of the nomenclature from the Jepson Manual (Baldwin et al. 2012), is used to provide current names for these species. The names for the special status plant species (narrow endemic, and criteria area species) all follow the CNPS Rare Plant Inventory (CNPS 2017).

## SECTION 3.0 ENVIRONMENTAL CONDITIONS

### 3.1 Soils

Soils on the project site include: a Chino silt loam; Chualar clay loam, 2 to 9 percent Slopes; and Grangeville fine sandy loam. Details on each of these soils series is described in the biological assessment previous proposed developments for these parcels (Klinefelter 2015, True 2012). The distribution of the soils on the project site is shown in Figure 6.

### 3.2 Plant Communities

The biological assessment for the proposed project noted six mapping units on these properties, since plant communities do not occur on these parcels. These vegetation/land cover types consist of: agricultural lands, active agriculture (croplands); agricultural lands, fallow fields (not present in 2017); agricultural lands, dairy; agricultural lands, abandoned dairy wastewater basin; developed; and disturbed and the distribution of these cover types is noted in Figure 4. The following section will describe each of these mapping units, as noted during the 2017 field survey, and the plant species observed during this study are shown in Appendix A. Photos of the project site are shown in Appendix B.

#### 3.2.1 Agricultural lands, Active Agriculture

The lands in the northwest and central parcel are currently planted in alfalfa. The fields are actively maintained, but some weedy species occur within and on the margin of these fields. Typical species found within these alfalfa fields consisted of: Bermuda grass (*Cynodon dactylon*), Persian knot weed (*Polygonum argeocoleon*), rescue grass (*Bromus catharticus*), goose grass (*Eleusine indica*), cheeseweed (*Malva parviflora*), lamb's quarters (*Chenopodium album*), barnyard grass (*Echinochloa crus-galli*), summer cypress (*Kochia scoparia*), rough pigweed (*Amaranthus deflexus*), dwarf nettle (*Urtica urens*), yellow sweet clover (*Melilotus indicus*), prickly lettuce (*Lactuca serriola*), flax-leaved horse weed (*Erigeron bonariensis*), annual rattlesnake weed (*Euphorbia serpens*), and field bindweed (*Convolvulus arvensis*). Other areas within these fields contained: bull thistle (*Cirsium vulgare*), spiny clotbur (*Xanthium spinosum*), weedy cudweed (*Pseudognaphalium lueto-album*), prickly lettuce, prickly sow thistle (*Sonchus asper*), lesser swine cress (*Lepidium didymus*), Russian thistle (*Salsola tragus*), common horse weed (*Conyza Canadensis*), nettle-leaved goosefoot (*Chenopodium murale*), alkali heliotrope (*Heliotropium curassavicum*), London rocket (*Sisymbrium irio*), and western field dodder (*Cuscuta campestris*).

A group of mulefat (*Baccharis salicifolia*) shrubs were located at the south end of the alfalfa field in the northwest corner of the site and on the margins of concrete rubble in the center parcel. There are no drainages associated with these shrubs, so it is assumed that they have established from the irrigation runoff. Other species found in this area included: Mediterranean tamarisk (*Tamarix ramosissima*), Bermuda grass, goose grass,



annual rattlesnake weed, five-hook bassia (*Bassia hyssopifolia*), barnyard grass, and narrow-leaved (*Asclepias fasciculatus*).

### **3.2.2 Agricultural lands, Fallow fields**

There were no fallow fields in the area of this 2015 mapping unit, as this area was now planted in several crops. In the early part of the season this parcel was planted in wheat (*Triticum aestivum*), and later in corn (*Zea mays*) or sorghum (*Sorghum bicolor*). There were few weeds observed in these fields, since there were under active cultivation at the time of the field surveys. Disturbed areas on the margins of these fields contained: summer cypress, London rocket, foxtail barley (*Hordeum murinum* ssp. *leporium*), rough pigweed, Palmer's pigweed (*Amaranthus palmeri*), cheeseweed, five-hook bassia, nettle-leaved goosefoot (*Chenopodium murale*), velvet leaf (*Abutilon theophrasti*), prickly lettuce, bull mallow (*Malva nicaeensis*), serrate-leaved saltbush (*Atriplex suberecta*), little-seed canary grass (*Phalaris minor*), and Russian thistle.

### **3.2.3 Agricultural lands, Dairy**

The abandoned dairy in the northeast corner of the project site, contains open corral areas and associated structures (barns, etc.) with the previous dairy operation. The open corral areas now contain a ruderal vegetation, which is characterized by number of species typically found in disturbed localities. The sites were composed of dense stands of summer cypress, along with London rocket, Russian thistle, foxtail barley, common sow thistle (*Sonchus oleraceus*) bristly ox tongue (*Helminthotheca echioides*), cheeseweed, serrate-leaved saltbush, and nettle-leaved goosefoot.

An area near the old equipment storage barn contained stands of Mexican elderberry (*Sambucus nigra*), along with mulefat, Italian thistle (*Carduus pycnocephalus*), chickweed (*Stellaria media*), common bedstraw (*Galium aparine*), and white-flowered nightshade (*Solanum americanum*).

### **3.2.4 Agricultural lands, Pasture**

This mapping unit was used in the 2015 study, to note areas where goats and Shetland ponies were being corralled. However, the animals had been removed by 2016 and the area should be merged into the disturbed mapping unit. These old animal pens were characterized by a cover of: London rocket, summer cypress, tumbling pigweed (*Amaranthus albus*), serrate-leaved saltbush, foxtail barley, five-hook bassia, lamb's quarters, redbush (*Atriplex rosea*), and horehound (*Marrubium vulgare*).

### **3.2.5 Developed**

The developed mapping unit includes some of the existing residences, structures from the previous dairy operations, and the areas of the current nursery operations, as noted in the biological assessment (Klinefelter 2015). Much of the vegetation in this area consists of ornamental shrub and tree plantings, along with plants being grown by the current operations. A variety of weedy species are also found on the margins of these nursery grounds, and are similar to other areas found on the project site.

### 3.2.6 Disturbed

The old corral areas for the former dairy in the southwest corner of the project site were mapped as disturbed in 2015. These areas are characterized by dense stands of London rocket, along with summer cypress, Bermuda grass, Russian thistle, and foxtail barley. Other weedy plant species found in these areas included: cheeseweed, common sow thistle, alkali heliotrope, tumbling pigweed (*Amaranthus albus*), serrate-leaved saltbush (*Atriplex suberecta*), earless crown beard (*Verbesina encelioides*), prickly lettuce, dwarf nettle, flax-leaved horse weed (*Conyza bonariensis*), puncture vine (*Tribulus terrestris*), and Persian knotweed.

A small pond, possibly from a broken irrigation line, was noted in the southwest corner of this mapping unit. This area contained the southern cat-tail (*Typha domingensis*), along with Kikuyu grass (*Pennisetum clandestinum*), annual blue grass (*Poa annua*), prickly lettuce, rabbit's foot grass (*Polypogon monspeliensis*), Persian knotweed, lesser duckweed (*Lemna minor*), and rough pigweed.







## SECTION 4.0 SPECIAL STATUS PLANT SPECIES

Special status plant species include those plant species listed by the state or federal governments as endangered, threatened or rare and species which are candidates for future listing. These include species noted on the CNDDDB special plants lists (CDFW 2017b). It also encompasses plant species determined by the California Native Plant Society to meet the CEQA (Section 15380) criteria as "rare and endangered", even though they have not been officially listed by any agency, and included on the CNPS Rare Plant Inventory (CNPS 2017), along with species noted as of "local concern" by botanists in the region (Roberts et al. 2004, 2007).

CNDDDB (CDFW 2017a) element reports were then developed for the Prado Basin, Corona North, USGS 7.5' quadrangles, to provide the known locations of special status plant species in the general region. The CNPS Rare Plant Inventory (CNPS 2017) and the Consortium of California Herbaria (Consortium 2017) were also reviewed for information on the distribution of special status plants recorded from the general region. Previous studies in the study area were also used to determine the known localities of these plant species and these included: FCS 2013; Harmsworth 2015, Klinefelter 2012, Lukos 2007a, 2007b, 2013a, 2013b, 2015; MBA 2003a, 2003b; True 2012; and Zembal 1985. The biological resources assessment (Klinefelter 2015) for the Chino Business Center (CBC) was also an important source of background information on these species, and in providing an overview of the current habitats that are present on these properties.

The special status plant species potentially occurring in the study are presented in Table 1, while Table 2 notes species recorded for the region but not anticipated to occur in the area of the project site.

The Chino Business Center Biological Assessment (Klinefelter 2015) noted that the most likely species to occur on the project site were the Lucky morning glory, and the Robinson's pepper grass. However, this list of "target" species was revised following the review of the existing literature, and previous environmental reports. The species considered most likely to occur on the project site included: the lucky morning glory; smooth tarplant; paniculate tarplant; and the southern California black walnut. The Robinson's peppergrass has been documented in the Chino Basin, but from areas of Riversidian sage scrub, not found on the project site.

The field survey documented all of the plant species found on these properties, but did concentrate on locating any potential habitats of the target species, such as any patches of alkali species, or less disturbed moist areas on the margins of the fields or active nursery areas. In addition, a review of the field characters separating *Convolvulus* from *Calystegia*, so that the botanist could confirm that there were no native morning glory species, in the patches of the commonly occurring field bindweed.

**Table 1 Special Status Plant Species Potentially Occurring on the Project Site**

Species	Federal/ State	CNPS/ MSHCP Other	Known or Expected Localities	Comments
<i>Abronia villosa</i> var. <i>aurita</i> Chaparral sand verbena		CRPR 1B.1	Historically reported for the Santa Ana River and the Corona areas.	Found in fine, sandy habitats often in alluvial areas. Very low potential for occurrence on the project site.
<i>Calystegia felix</i> Lucky morning glory		CRPR 3.1	Chino, Chino Creek, South Los Angeles (historic), and Pico Rivera (historic).	Currently known only from plants found at a few localities in the City of Chino. Moderate potential for occurring on the project site.
<i>Centromadia pungens</i> ssp. <i>laevis</i> Smooth tarplant		CRPR 1B.1	Santa Ana River, Lytle Creek, Cities of San Bernardino, and Ontario.	Found in alkali meadows or grasslands. Also found on the margin of riparian habitats in the region. Moderate potential for occurrence on the project site.
<i>Deinandra paniculata</i> Paniculate tar plant		CRPR 4.2	Santa Ana River, Norco Hills, La Sierra Hills, San Bernardino Valley, Fontana and Jurupa Hills.	Found in annual grasslands and in openings of coastal sage scrub. Moderate potential for occurrence on the project site.
<i>Juglans californica</i> Southern California black walnut		CRPR 4.2	Prado Basin, Santa Ana River, Chino Hills, Lower San Bernardino Valley area including Colton, Fontana, City of San Bernardino, Jurupa Hills, Cajon Wash, and Lytle Creek.	Grasslands, Riversidian sage scrub, oak woodlands, alluvial fan sage scrub. In the region this species is often associated with walnuts not native to southern California including <i>J. hindsii</i> , <i>J. nigra</i> , and <i>J. regia</i> . Not observed on the project site.

**Table 1 Special Status Plant Species Potentially Occurring on the Project Site**

<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper grass		CRPR 4.3	Prado Basin, Chino Hills, Norco Hills, Jurupa Hills, Claremont.	Found in openings of coastal sage scrub. Very low potential to occur on the project site.
<i>Sidalcea neomexicana</i> Salt Spring Checkerbloom		CRPR 2B.2	Historically recorded for Chino Creek, Chino, San Bernardino Valley	Found in alkali meadows and there has been no recent records in the region. Very low potential for occurrence.

**Table 1 Special Status Plant Species Potentially Occurring on the Project Site**

**Federal Designations:**

FE= Listed by the Federal government as an endangered species.  
FT = Listed by the Federal government as a threatened species.

**State Designations:**

CE = Listed as endangered by the State of California.  
CT= Listed by the State of California as a threatened species.

**California Rare Plant Rank (CRPR):**

CRPR 1A = Plants presumed extinct in California.  
CRPR 1B = Plants considered rare, threatened or endangered in California and elsewhere.  
CRPR 2 = Plants rare, threatened or endangered in California but more common elsewhere.  
CRPR 3 = Plants about which we need more information - A review list.  
CRPR 4 = Plants of limited distribution - A watch list.

**CNPS Threat Code Extensions**

.1 = Seriously endangered in California.  
.2 = Fairly endangered in California.  
.3 = Not very endangered in California.

**Other:**

LC = Local Concern

**Table 2 Plant Species of Special Interest Known to Occur  
in the Region, but not Anticipated in the Vicinity of the Project Site**

Species	Federal/ State	CNPS/Other	Known or Expected Localities	Comments
<i>Atriplex coulteri</i> Coulter's saltbush		CRPR 1B.2	Historic collections for Chino Creek. Otherwise mostly known from coastal terraces in Orange and San Diego Counties, and on the Channel Islands. Other material from western Riverside County has also been identified as this species.	Found in alkali grasslands, coastal terraces.
<i>Calochortus catalinae</i> Catalina mariposa lily		CRPR 4.2	Recorded from the Chino Hills, Puente Hills, San Jose Hills..	Perennial grasslands, annual grasslands, openings in coastal sage scrub
<i>Calochortus weedii</i> var. <i>intermedius</i>		CRPR 1B.2	Recorded from the Chino Hills, generally known from lower elevations of the Santa Ana Mountains.	Found in openings of coastal sage scrub or chaparral.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower		CRPR 1B.1	Recorded from alluvial washes near Claremont, Etiwanda Creek, Cajon-Lytle creek and Colton.	Found in sandy soils in the openings of coastal sage scrub, alluvial fan sage scrub, and chaparral.
<i>Dudleya multicaulis</i> Many-stemmed dudleya		CRPR 1B.2	Recorded from the Chino Hills, Elephant Hill, South of Ontario, Puddingstone, Johnson's Pasture (Claremont).	Found in rocky openings of coastal sage scrub.
<i>Horkelia cuneata</i> var. <i>puberula</i> Mesa horkelia		CRPR 1B.1	Recorded from Etiwanda, Glendora, Claremont, Colton, and the San Bernardino Valley.	Found in openings of coastal sage scrub, chaparral, or oak woodland.

**Table 2 Plant Species of Special Interest Known to Occur  
in the Region, but not Anticipated in the Vicinity of the Project Site**

<i>Phacelia stellaris</i> Brands star phacelia		CRPR 1B.1	Recorded from the Santa Ana River Wash, Rancho Cucamonga, San Gabriel River	Found in open sandy flats in alluvial fan sage scrub, coastal sage scrub, or coastal dunes.
<i>Pseudognaphalium leucocephalum</i> Alluvial wash everlasting		CRPR 2B.2	Santa Ana River (Historic), San Bernardino Valley (Historic), washes in the lower San Gabriel Mountains.	Found in sandy washes.
<i>Symphotrichum defoliatum</i> [ <i>Aster bernardinus</i> ] San Bernardino Aster		CRPR 1B.2	Santa Ana River Cyn., Lytle Creek	Riparian habitats, washes in coastal sage scrub or chaparral.

**See Table 1 for description of abbreviations used in this table.**

## SECTION 5.0 RESULTS

The field surveys conducted in 2017 did not locate any special status plant species on the project site. Overall, these parcels have little, if any, potential habitat for any of the special status plant species known from the area of the proposed project.

Field bindweed was commonly found on the project site, and the bract characters on the plants at each locality were carefully examined to confirm that the material was the field bindweed and not a native morning glory. The field survey did not observe native morning glory species (*Calystegia sp.*) on the parcels included in this study.

The survey did locate an area of several annual saltbush species in the area mapped as a pasture mapping unit, which could indicate potential habitat for the smooth tarplant. However, the smooth tarplant was not observed during the survey of these properties.

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## **APPENDIX A**

### **PLANT SPECIES OBSERVED ON THE PROJECT SITE**

## LEGEND

- \* Non-native species
- † Special Status Plant Species

Note: Taxonomy of scientific and common names generally follows the Jepson manual (Baldwin et al. 2012), with some recent name changes following the checklist of vascular plants of western Riverside County (Roberts et al. 2004, 2007). Common names follow Roberts et al. 2004.

## MAGNOLIOPHYTA - FLOWERING PLANTS

### EUDICOTYLEDONES EUDICOTS

#### ADOXACEAE ELDERBERRY FAMILY

*Sambucus nigra*  
Mexican elderberry

#### AIZOACEAE FIG-MARIGOLD FAMILY

\**Aptenia cordifolia*  
Red apple

*Lampranthus* sp.  
Trailing ice plant

*Trianthema portulacastrum*  
Horse purslane

#### AMARANTHACEAE AMARANTH FAMILY

\**Amaranthus albus*  
Tumbling pigweed

\**Amaranthus blitoides*  
Prostrate pigweed

\**Amaranthus hybridus*  
Slender amaranth

*Amaranthus palmeri*  
Palmer's pigweed

*Amaranthus retroflexus*  
Rough pigweed

ANACARDIACEAE  
SUMAC FAMILY

\**Schinus molle*  
Peruvian pepper

APOCYNACEAE  
DOGBANE FAMILY

\**Vinca major*  
Periwinkle

*Asclepias fasciculatus*  
Narrow-leaved milkweed

ASTERACEAE  
SUNFLOWER FAMILY

*Baccharis pilularis* (planted)  
Coyote bush

*Baccharis salicicina*  
Emory's baccharis

*Baccharis salicifolia*  
Mulefat

\**Carduus pycnocephalus*  
Italian thistle

\**Cirsium vulgare*  
Bull thistle

\**Erigeron bonariensis*  
Flax-leaved horseweed

*Erigeron canadensis*  
Common horseweed

\**Gazania linearis*  
Gazania

\**Helminthotheca echioides*  
Bristly ox tongue

\**Lactuca serriola*  
Prickly lettuce

*Laennecia coulteri*  
Coulter's horseweed

\**Osteospermum fruticosa*  
Freeway daisy

*Pseudognaphalium californicum*  
California everlasting

\**Pseudognaphalium luteoalbum*  
Weedy cudweed

\**Senecio vulgaris*  
Common groundsel

\**Silybum marianum*  
Milk thistle

\**Sonchus asper*  
Prickly sow thistle

\**Sonchus oleraceus*  
Common sow thistle

*Symphyotrichum subulatum* var. *parviflorum*  
Slender aster

\**Verbesina encelioides* var. *exauriculata*  
Earless crown beard

\**Xanthium spinosum*  
Spiny cocklebur

#### BIGNONIACEAE TRUMPET VINE FAMILY

\**Tecoma capensis*  
Cape honeysuckle

#### BORAGINACEAE FORGET-ME-NOT FAMILY

*Amsinckia intermedia*  
Common fiddleneck

*Amsinckia reterosa*  
Gray fiddleneck

*Heliotropium curassavicum*  
Alkali heliotrope

BRASSICACEAE  
MUSTARD FAMILY

\**Capsella bursa-pastoris*  
Shepherd's purse

\**Lepidium didymus*  
Swine cress

\**Lepidium latifolium*  
Perennial peppergrass

\**Sisymbrium irio*  
London rocket

CACTACEAE  
CACTUS FAMILY

\**Opuntia ficus-indica*  
Barbary fig

CARYOPHYLLACEAE  
PINK FAMILY

\**Stellaria media*  
Common chickweed

CHENOPODIACEAE  
GOOSEFOOT FAMILY

*Atriplex argentea* ssp. *expansa*  
Mojave silver scale

\**Atriplex rosea*  
Redscale

\**Atriplex serenana* var. *serenana*  
Bracted saltscale

\**Atriplex suberecta*  
Serrate-leaved saltbush

\**Bassia hyssopifolia*  
Five-hook bassia

\**Chenopodium album*  
Lamb's quarters

\**Chenopodium murale*  
Nettle-leaved goosefoot



\**Kochia scoparia* ssp. *scoparia*  
Summer cypress

\**Salsola tragus*  
Russian thistle

CONVOLVULACEAE  
MORNING-GLORY FAMILY

\**Convolvulus arvensis*  
Field bindweed

*Cuscuta campestris*  
Western field dodder

EUPHORBIACEAE  
SPURGE FAMILY

\**Euphorbia maculata*  
Spotted spurge

\**Euphorbia serpens*  
Annual rattlesnake weed

FABACEAE  
PEA FAMILY

\**Acacia longifolia*  
Golden wattle

\**Acacia* sp.  
Acacia

\**Medicago sativa*  
Alfalfa

\**Melilotus indicus*  
Yellow sweet clover

\**Robinia pseudoacacia*  
Black locust

GERANIACEAE  
GERANIUM FAMILY

\**Erodium cicutarium*  
Red-stemmed filaree

LAMIACEAE  
MINT FAMILY

\**Rosmarinus officinalis*  
Rosemary

MALVACEAE  
MALLOW FAMILY

\**Abutilon theophrasti*  
Velvet leaf

\**Malva nicaeensis*  
Bull mallow

\**Malva parviflora*  
Cheeseweed

MORACEAE  
MULBERRY FAMILY

\**Morus alba*  
White mulberry

MYRTACEAE  
MYRTLE FAMILY

\**Eucalyptus camaldulensis*  
River red gum

OLEACEAE  
OLIVE FAMILY

\**Fraxinus uhdei*  
Shamel ash

\**Jasminum* sp.  
Jasmine

\**Ligustrum lucidum*  
Chinese privet

PLANTAGINACEAE  
PLANTAIN FAMILY

\**Veronica persica*  
Persian speedwell

PLANTANACEAE  
SYCAMORE FAMILY

\**Platanus* x *acerifolia*  
London plane tree

POLYGONACEAE  
BUCKWHEAT FAMILY

*Persicaria lapathifolia*  
Willow smartweed

\**Polygonum aviculare*  
Common knotweed

\**Polygonum argeocoleon*  
Persian knotweed

\**Rumex crispus*  
Curly dock

PLUMBAGINACEAE  
LEADWORT FAMILY

\**Plumbago auriculata*  
Plumbago

PORTULACACEAE  
PURSLANE FAMILY

\**Portulaca oleracea*  
Purslane

ROSACEAE  
ROSE FAMILY

\**Prunus caroliniana*  
Carolina cherry

\**Rhaphiolepis indica*  
India hawthorn

\**Rosa* sp.  
Cultivated rose

RUBIACEAE  
MADDER FAMILY

\**Galium aparine*  
Common bedstraw

SALICACEAE  
WILLOW FAMILY

*Salix lasiolepis* (seedling)  
Arroyo willow

SCROPHULARIACEAE  
FIGWORT FAMILY

\**Myoporum laetum*  
Myoporum

\**Myoporum parviflorum*  
Dwarf myoporum

SIMAROUBACEAE  
QUASSIA FAMILY

\**Ailanthus altissima*  
Tree of Heaven

SOLANACEAE  
NIGHTSHADE FAMILY

\**Datura stramonium*  
Pale-flowered thorn apple

\**Lycopersicon esculentum*  
Tomato

\**Nicotiana glauca*  
Tree tobacco

\**Physalis philadelphica*  
Tomotillo

\**Solanum elaeagnifolium*  
Silver-leaf horse nettle

\**Solanum americanum*  
White nightshade

\**Solanum physalifolium* var. *nitidibaccatum*  
Hairy nightshade

TAMARICACEAE  
TAMARISK FAMILY

\**Tamarix ramosissima*  
Mediterranean tamarisk

ULMACEAE  
ELM FAMILY

\**Ulmus parviflora*  
Chinese elm

URTICACEAE  
NETTLE FAMILY

\**Urtica urens*  
Dwarf nettle

VITACEAE  
GRAPE FAMILY

\**Parthenocissus inserta*  
Woodbine

ZYGOPHYLLACEAE  
CALTROP FAMILY

\**Tribulus terrestris*  
Puncture vine

**MONOCOTYLEDONES**  
**MONOCOTS**

AGAVACEAE  
AGAVE FAMILY

\**Agave attenuata*  
Foxtail agave

\**Yucca gloriosa*  
Spanish dagger

ARACEAE  
DUCKWEED FAMILY

*Lemna minor*  
Lesser duckweed

ARECACEAE (PALMAE)  
PALM FAMILY

\**Syagrus romanzoffiana*  
Queen palm

*Washingtonia filifera*  
California fan palm

\**Washingtonia robusta*  
Mexican fan palm

ASPHODELACEAE  
ASPHODEL FAMILY

\**Phormium tenax*  
New Zealand Flax

CYPERACEAE  
SEDGE FAMILY

\**Cyperus rotundus*  
Purple nut grass

POACEAE  
GRASS FAMILY

\**Avena barbata*  
Slender wild oat

\**Avena fatua*  
Wild oat

\**Bromus catharticus*  
Rescue grass

\**Bromus diandrus*  
Ripgut brome

\**Bromus madritensis ssp. rubens*  
Red brome

\**Cynodon dactylon*  
Bermuda grass

\**Echinochloa crus-galli*  
Barnyard grass

\**Erharta erecta*  
Panic veldt grass

\**Eleusine indica*  
Goose grass

\**Hordeum murinum ssp. leporinum*  
Foxtail barley

*Leptochloa fusca* subsp. *uninervia*  
Mexican sprangletop

*\*Pennisetum clandestinum*  
Kikuyu grass

*\*Phalaris minor*  
Little-seed canary grass

*\*Poa annua*  
Annual blue grass

*\*Polypogon monspeliensis*  
Rabbit's foot grass

*\*Schismus barbatus*  
Mediterranean schismus

*\*Setaria adherens*  
Bur bristle grass

*\*Setaria viridis*  
Green bristle grass

*\*Sorghum bicolor*  
Sorghum

*\*Sorghum halepense*  
Johnson grass

*\*Triticum aestivum*  
Wheat

*\*Zea mays*  
Corn

#### TYPHACEAE CAT-TAIL FAMILY

*Typha domingensis*  
Southern cat-tail

*Typha latifolia*  
Broad-leaved cat-tail

## **APPENDIX B**

### **PHOTOS OF THE CURRENT CONDITIONS ON THE PROJECT SITE**





Photo A1 – Central parcel looking north (6/28/2017)



Photo A2- Central Parcel looking northwest (5/30/2017)





Photo A3 – Central Parcel looking south (6/28/2017)



Photo A4 – Central Parcel looking east (5/30/2017)





Photo A5 – Southern area of the eastern parcel, looking east (6/28/2017)



Photo A6 – Northern area of the western parcels, looking southwest (6/28/2017)





Photo A7 – Old dairy barns in the northeast area of the eastern parcel (6/28/2017)



Photo A8 – Northeastern parcel of the western parcel, noting the existing nursery operation (5/30/2017)





Figure A9 – Southwest area of the western parcels, looking northwest, note the old animal pens and pasture areas (5/30/2017)



Photo A10- Southwest corner of the western parcels, note the existing nursery operation (5/30/2017)

## **APPENDIX C**

### **Special Status Species Assessment Tables**

Appendix C - Special Status Species Assessment Tables

Table 1. Special Status Plant Species with Potential to Occur at the Site

Note: These species have been recorded in the CNPS Online Rare and Endangered Plant Inventory within the USGS Prado Dam, Corona South, Corona North, Guasti, Ontario, San Bernardino South, Fontana, Corona North, and Riverside West quads, and/or within the vicinity in the CNDDB, USFWS, and/or Consortium of California Herbaria on-line databases, and/or discussed in the City's Preserve Specific Plan EIR.

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Notes
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	None/None	1B.1	Occurs in sandy places in coastal scrub, chaparral, desert dunes between approx. 75-1,600 meters (approx. 250-5,250 feet) in elevation in the central and south coast, and western Sonoran Desert. This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Allium munzii</i>	Munz's onion	FE/CT	1B.1	Occurs primarily in mesic habitat and/or clay soil in grassy openings in coastal-sage scrub, chaparral, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland between 300-900 meters (~985-2,950 feet) in elevation in the eastern South Coast and northwest Peninsular Ranges (western Riverside Co.). This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Ambrosia pumila</i>	San Diego ambrosia	FE/None	1B.1	Found in sandy loam or clay, and sometimes alkaline soils, in chaparral, coastal scrub, valley and foothill grassland, and vernal pools, often in disturbed areas, between approx. 20-600 meters (approx. 65-1,970 feet) in elevation in the South Coast and Peninsular Ranges (Riverside, San Diego Counties) to Baja California. It is unlikely that this species would occur at the Site based on habitat requirements in relation to site conditions.
<i>Arenaria paludicola</i>	marsh sandwort	FE/CE	1B.1	Occurs in sandy areas and openings in marshes, swamps (freshwater or brackish), and wet meadows below 300 meters (~980 feet) in elevation in the southern Central Coast (Nipomo Mesa, San Luis Obispo Co.), San Francisco Bay Area (extirpated), and South Coast (Santa Ana River) to Mexico. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Asplenium vespertinum</i>	western spleenwort	None/None	4.2	Found in rocky areas in chaparral, cismontane woodland, and coastal scrub between approx. 180-1,000 meters (approx. 590-3,280 feet) in elevation. Perennial rhizomatous herb. Blooms February-June. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Astragalus brauntonii</i>	Braunton's milk-vetch			Typically found in recent burns or disturbed areas, usually on sandstone with carbonate layers, in chaparral, coastal scrub, and valley and foothill grassland at elevations below 650 meters (~2,130 feet) in elevation in the Western Transverse Ranges, San Gabriel Mountains, and northern Peninsular Ranges. It is known to occur in the northernmost Santa Ana Mountains (Coal and Gypsum Canyons) in Orange County, just west of the Riverside County boundary. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Astragalus hornii</i> var. <i>hornii</i>	Horn's milk-vetch	None/None	1B.1	Found in alkaline areas in lake margins, meadows, seeps, playas, and salty flats between approx. 60-850 meters (approx. 200-2,800 feet) in elevation in the south San Joaquin Valley, South Coast, Western Transverse Ranges, and western edge of the Mojave Desert, to west-central Nevada. This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Atriplex coulteri</i>	Coulter's saltbush	None/None	1B.2	Found in alkaline or clay soils in coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland between approx. 3-460 meters (~10-1,500 feet) in elevation. Perennial herb/March-October. This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Berberis nevadensis</i>	Nevin's barberry	FE/CE	1B.1	Found in sandy or gravelly soils in washes, chaparral, cismontane woodland, coastal scrub, and riparian scrub between approx. 275-825 meters (~900-2,700 feet) in elevation. Perennial evergreen shrub. Blooms March-June. This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Calochortus catalinae</i>	Catalina mariposa lily	None/None	4.2	Found in heavy soil, open grassland, scrub, chaparral, cismontane woodland, coastal scrub, valley and foothill grassland below 700 meters (approx. 2,300 feet) in elevation on the south Central Coast, west South Coast, and especially Channel Islands. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Calochortus plummerae</i>	Plummer's mariposa lily	None/None	4.2	Found in chaparral, coastal sage scrub, cismontane woodland, lower montane coniferous forest, and valley and foothill grasslands on rocky granitic and/or alluvial substrate between approx. 100-1,700 meters (approx. 300 to 5,600 feet) in elevation. Known from the Santa Monica Mountains to San Jacinto Mountains in Riverside, San Bernardino, Los Angeles and Ventura Counties. Perennial herb (geophyte). Blooms May-July. This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.

Appendix C - Special Status Species Assessment Tables  
Table 1. Special Status Plant Species with Potential to Occur at the Site

<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa lily	None/None	1B.2	Found in dry, rocky, open slopes, calcareous soils in chaparral, coastal scrub, valley and foothill grassland in the South Coast and northern Peninsular Ranges between 0 and approx. 850 meters (0-2,780 feet) in elevation. Perennial bulbiferous herb, blooms May-July. This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Calystegia felix</i>	lucky morning-glory	None/None	3.1	This new morning glory species is described from the Los Angeles, San Gabriel, and Santa Ana River basins. Historical collections of the species, which prior to 2011 had not been seen alive in 94 years, have been misidentified as <i>Calystegia sepium</i> (L.) R. Br. subsp. <i>binghamiae</i> (Greene) Brummitt. The undescribed species was rediscovered in the City of Chino in April of 2011, a few miles north of the location where the most recent previous collection had been made by I. M. Johnston in 1917. The plants were found just prior to their likely destruction by grading and trenching for an underground power line. Additional searches have resulted in the discovery of five additional occurrences, all of them in the City of Chino. This species is at high risk of soon becoming extinct in the wild. All of the known extant occurrences are associated with well-watered landscaping on recently completed industrial, commercial, and residential developments. Every known living occurrence is within the limits of a ciénega belt, which is now mostly historical. Otherwise, the new species is known only from collections made around the turn of the 20th century in what are now heavily urbanized areas, including one from South Los Angeles and another from Pico Rivera in Los Angeles County. Portions of the site are irrigated to cultivate row crops and nursery plants and one non-native morning glory species was detected on-site - bindweed ( <i>Convolvulus arvensis</i> ). This new morning glory species is extremely rare, but since it has been found in the City of Chino in well-watered areas, is it reasonable to infer that there is a moderate potential that it may occur on-site.
<i>Camissoniopsis lewisii</i>	Lewis' evening-primrose	None/None	3	Occurs in sandy or clay soils in grassland, coastal scrub, coastal bluff scrub, cismontane woodland, coastal dunes, valley and foothill grassland below 300 meters (~980 feet) in elevation in the South Coast and western Peninsular Ranges to northern Baja California. This species is not expected to occur at the Site based on site conditions.
<i>Carex comosa</i>	bristly sedge	None/None	2B.1	Found in wet places, marshes, swamps, and lake margins in valley and foothill grassland and coastal prairie below approx. 625 meters (approx. 2,050 feet) in elevation in the Inner North Coast Ranges, High Cascade Range, Great Central Valley, north Central Coast (Bodega Bay), San Francisco Bay Area, San Bernardino Mountains, Modoc Plateau (Shasta Co.); to British Columbia and eastern North America. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Centromadia pungens</i> subsp. <i>laevis</i>	smooth tarplant	None/None	1B.1	Occurs in open alkaline areas, playas, poorly drained flats, meadows and seeps, depressions, waterway banks and beds, grassland, chenopod scrub, riparian woodland, valley and foothill grassland, and disturbed sites below 650 meters (approx. 2,130 feet) in elevation in the South Coast and Peninsular Ranges, to northern Baja California. This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's beak	FE/CE	1B.2	Occurs in coastal salt marshes, swamps, and dunes below 30 meters (~100 feet) in elevation in the southern Central Coast (Morro Bay) and South Coast to northern Baja California. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Chorizanthe leptotheca</i>	Peninsular spineflower	None/None	4.2	Occurs in granitic sand or gravel in chaparral, coastal scrub, alluvial fan, and lower montane coniferous forest between 300-1,900 meters (approx. 980-6,230 feet) in elevation in the eastern Peninsular Ranges, to northern Baja California. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	None/None	1B.1	Found in sandy or rocky areas and openings in chaparral, cismontane woodland, coastal scrub (including Riverside sage scrub and Riverside alluvial fan sage scrub), and valley and foothill grassland between approx. 275-1,220 meters (approx. 900-4,000 feet) in elevation. Annual herb. Blooms April-June. This species is not expected to occur at the Site based on site conditions.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	None/None	1B.2	Sandy or gravelly soils in Mojavean desert scrub, pinyon and juniper woodland and coastal scrub (alluvial fans) between approx. 300-1,200 meters (approx. 985-3,940 feet) in elevation. Known from 48 occurrences in California (Los Angeles, Riverside, San Bernardino and San Diego Counties). Nearest local records from the vicinity of Devore. Where it has been recorded in the vicinity in alluvial areas, those areas are located along the large active alluvial systems of Cajon and Lytle Creeks (Telegraph Peak, Cajon and Devore quads). Not expected to occur on-site.
<i>Cladium californicum</i>	California sawgrass	None/None	2B.2	Occurs in meadows and seeps, marshes and swamps (alkaline or freshwater). There is no mesic habitat on-site and therefore this species is not expected to occur on-site.
<i>Convolvulus simulans</i>	small-flowered morning-glory	None/None	4.2	Occurs on clay and occasionally serpentine substrates and seeps in annual grassland, coastal scrub, chaparral (openings), and valley and foothill grassland between approx. 30-875 meters (approx. 100-2,870 feet) in elevation in the southern Sierra Nevada Foothills, San Joaquin Valley/Inner South Coast Ranges, San Francisco Bay Area, southern Outer South Coast Ranges, South Coast, Channel Islands, Western Transverse Ranges, and Peninsular Ranges; to Arizona, Baja California. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.



Appendix C - Special Status Species Assessment Tables  
Table 1. Special Status Plant Species with Potential to Occur at the Site

<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	None/None	2B.2	Found in marshes and swamps (freshwater) below 280 meters (approx. 920 feet) in elevation. Jepson eflora indicates that the species is extirpated. It was formerly sporadically collected in San Bernardino County between 1890-1898. It was last seen in 1948 at a marsh near Snelling (Merced County). The record from Warm Creek in San Bernardino County is presumed to be extirpated (CNPS). This species is not expected on-site due to lack of suitable habitat and presumed extirpation.
<i>Deinandra paniculata</i>	paniculate tarplant	None/None	4.2	This species is typically found in grasslands (sometimes vernal mesic), open shrublands, roadsides, and fallow fields, and is associated with clay, alkaline, or sandy soils between approximately 25 and 1,250 meters (approx. 80 and 3,100 feet) in elevation. The core population area includes the Perris Basin and southeast Orange County (Fred Roberts, 2013). Annual herb. Blooms April-November. This species is not expected to occur at the Site based on site conditions.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE/CE	1B.1	Found on sandy soils in openings in chaparral, cismontane woodland, and alluvial fan scrub (usually late seral stage) in floodplain terraces and benches that receive overbank deposits every 50 to 100 years from generally large washes or rivers between approx. 200-760 meters (approx. 650-2,500 feet) in elevation. Also found on gravel soils of Temecula arkose deposits in openings in chamise chaparral in the Vail Lake Area. Many historical occurrences lost to urbanization and stream channelization. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Dudleya multicaulis</i>	many-stemmed dudleya	None/None	1B.2	Found on heavy, often clay soils, coastal plains, chaparral, coastal scrub, valley and foothill grassland, and sandstone outcrops below 800 meters (approx. 2625 feet) in elevation. No heavy clay soils on-site and thus this species is not expected to occur.
<i>Eriastrum densifolium</i> subsp. <i>sanctorum</i>	Santa Ana River woollystar	FE/CE	1B.1	Santa Ana River woollystar is associated with sandy or gravelly soils of high energy washes, floodplains, and dry riverbeds (primarily the Santa Ana River and larger tributaries [e.g. Lytle and Cajon Creeks]) and other sandy, open habitats of floodplains and terraced fluvial deposits, primarily in alluvial fan sage scrub and chaparral in San Bernardino and Riverside Counties. This species is not expected to occur on-site based on species distribution and habitat requirements.
<i>Galium californicum</i> ssp. <i>primum</i>	Alvin Meadow bedstraw	None/None	1B.2	Found in granitic, sandy soils in shady areas in chaparral and lower montane coniferous forest (primarily Jeffrey-Coulter-pine forest) between approx. 1,350-1,700 meters (approx. 4,400-5,575 feet) in elevation in the South Coast and San Jacinto Mountains. This species is known from only four occurrences. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions, and where elevations are ~600 feet.
<i>Helianthus nuttallii</i> subsp. <i>parishii</i>	Los Angeles sunflower	None/None	1A	Occurs in marshes and swamps (coastal salt and freshwater) below 1,675 meters (approx. 5,500 feet) in elevation in southwestern California. Last seen in 1937. This species is not expected to occur on-site based on lack of suitable habitat.
<i>Hesperocyparis forbesii</i>	Tecate cypress	None/None	1B.1	Typically occurs on clay, gabbroic, or metavolcanic soils in chaparral and closed-cone coniferous forest between 450-1,500 meters (~1,475-4,920 feet) in elevation in the western Peninsular Ranges. It is sometimes planted outside of its native range in Southwestern California mountains. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions. This species is not known from San Bernardino County.
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	mesa horkelia	None/None	1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub between 70-810 meters (approx. 230-2,660 feet) in elevation. Perennial herb. Blooms February-September. Not expected at the Site based on species distribution and habitat requirements.
<i>Juglans californica</i>	Southern California black walnut	None/None	4.2	Chaparral, cismontane foothill woodland, coastal scrub, wetland-riparian habitats between approx. 50-900 meters (approx. 165-2,950 feet) in elevation. Walnut woodland is a much fragmented, rare, and declining vegetation community. Threatened by urbanization and grazing, non-native plants, and possibly by lack of natural reproduction. Possibly threatened by hybridization with horticultural varieties of walnut. Perennial deciduous tree. Blooms March-August. Not expected at the Site based on species habitat requirements at site conditions.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	None/None	1B.1	Found in saline places, marshes and swamps (coastal salt), playas, and vernal pools below 1,220 meters (approx. 4,000 feet) in elevation in the Inner North Coast Ranges, southern Sierra Nevada Foothills, Tehachapi Mountain Area, Great Central Valley, Central Western California, South Coast, northern Channel Islands (Santa Rosa Island), Peninsular Ranges, and western Mojave Desert. This species is not expected to occur at the Site based on species habitat requirements (mesic) in relation to site conditions.
<i>Lepechinia cardiophylla</i>	heart-leaved pitcher sage	None/None	1B.2	Occurs in chaparral, closed-cone coniferous forest, and cismontane woodland between 600-1,200 meters (~1,950-3,950 feet) in elevation in the Peninsular Ranges. Not expected at the Site based on species distribution and habitat requirements in relation to site conditions.

Appendix C - Special Status Species Assessment Tables

Table 1. Special Status Plant Species with Potential to Occur at the Site

<i>Lepidium virginicum</i> subsp. <i>menziesii</i> [var. <i>robinsonii</i> ]	Robinson's pepper-grass	None/None	4.3	Found in dry soils in coastal sage scrub, chaparral, grasslands, and disturbed areas below approximately 885 meters (approx. 2900 feet) in elevation. This species has a moderate potential to occur in the fallow fields, disturbed areas, and in the abandoned wastewater basin at the Site.
<i>Mimulus palmeri</i> [diffusus]	Palomar monkeyflower	None/None	4.3	Typically found in sandy or gravelly washes and disturbed areas in chaparral and lower montane coniferous forest below approx. 2,100 meters (~6,900 feet) in elevation in the southern Sierra Nevada Foothills, Tehachapi Mountain Area, northern Outer South Coast Ranges, Transverse Ranges, Peninsular Ranges, and western Mojave Desert, to northern Baja California. This species is not known from San Bernardino County. Not expected at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Monardella australis</i> subsp. <i>jokerstii</i>	Jokerst's monardella	None/None	1B.1	Occurs on steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes in chaparral and lower montane coniferous forest between approx. 1,350-1,750 meters (4,420-5,740 feet) in elevation. Not expected at the Site based on species distribution and habitat requirements and where elevations are approx. 600 feet.
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	intermediate monardella	None/None	1B.3	Typically occurs in chaparral, oak woodland, cismontane woodland, and occasionally lower montane coniferous forest on dry slopes (usually understory) between 200-1,250 meters (~650-4,100 feet) in elevation in the northwest Peninsular Ranges (Orange, w Riverside, n San Diego cos.). It is known only from the Santa Ana and Palomar Mtns. This species is not known from San Bernardino County. Not expected at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Monardella pringlei</i>	Pringle's monardella	None/None	1A	Found in sandy coastal scrub between 300-400 meters (approx. 985-1,315 feet) in elevation. Known from only two occurrences from the vicinity of Colton. Last seen in 1941. Habitat lost to urbanization. Recent CNPS field surveys have been unsuccessful. Not expected at the Site based on species distribution and habitat requirements.
<i>Muhlenbergia californica</i>	California muhly	None/None	4.3	Occurs in mesic areas including seeps and streambanks in chaparral, coastal scrub, lower montane coniferous forest, and meadows and seeps between approx. 100-2,000 meters (approx. 325-6,560 feet) in elevation. No mesic habitat at the Site; not expected at the Site.
<i>Nasturtium gambelii</i>	Gambel's water cress	FE/CT	1B.1	Occurs in marshes and swamps (freshwater or brackish), streambanks, and lake margins below 350 meters (approx. 1,150 feet) in elevation in the southern Central Coast and South Coast; to Mexico. It is nearly extinct in U.S.; known in CA from only four occurrences. The historical report from San Diego Co. likely constitutes a misidentification (CNPS). This species is not expected to occur at the Site based on habitat requirements in relation to site conditions.
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	None/None	1B.1	Found in mesic habitat in coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), and vernal pools between approx. 15-1,210 meters (approx. 50-3,970 feet) in elevation. No mesic habitat at the Site. Not expected at the Site based on species habitat requirements.
<i>Nolina cismontana</i>	chaparral nolina	None/None	1B.2	Typically occurs in dry chaparral and coastal scrub on sandstone or gabbro soils in the coastal mountains between 200-1,300 meters (~650-4,260 feet) in elevation in the South Coast, Western Transverse Ranges, and Peninsular Ranges. Not expected at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Phacelia keckii</i>	Santiago Peak phacelia	None/None	1B.3	Found in open chaparral and closed-cone coniferous forest between 500-1,600 meters (~1,640-5,250 feet) in elevation in the Peninsular Ranges (Santa Ana Mtns). It may be abundant after fire. It is known only from the Santa Ana and Agua Tibia Mtns in Orange and Riverside Counties. Not expected at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Phacelia stellaris</i>	Brand's star phacelia	FC/None	1B.1	Found in open areas in coastal dunes and coastal scrub below 400 meters (approx. 1,300 feet) in elevation in the South Coast to Baja California. It is known from approximately ten occurrences; historical occurrences have been extirpated by development. Not expected at the Site based on species distribution and habitat requirements.
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort	None/None	4.3	Occurs in chaparral, oak woodland, cismontane woodland, and riparian woodland between 90-1,270 meters (~300-4,165 feet) in elevation in the southern Outer South Coast Ranges, Western Transverse Ranges, San Gabriel Mountains, and Peninsular Ranges to northern Baja California. This species is not known from San Bernardino County. Not expected at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Pseudognaphalium leucocephalum</i>	Alluvial was everlasting	None/None	2.2	Found on sandy or gravelly benches, dry stream bottoms, canyon bottoms below 500 meters (1,640 feet). South Coast, San Bernardino Mountains, Peninsular Ranges; Arizona, New Mexico, Mexico. Perennial herb. Blooms July-October. This species is not expected to occur at the Site based on site conditions.
<i>Ribes divaricatum</i> var. <i>parishii</i>	Parish's gooseberry	None/None	1A	Found in riparian woodland between 65-300 meters (approx. 210-1,000 feet) in elevation. Last seen in 1980 at Whittier Narrows Nature Center (LA County). Recent CNPS surveys have been unsuccessful. It is known from fewer than five historical occurrences. It is likely extirpated due to a combination of dry years, altered stream flows, human-caused fires, habitat loss, and invasive species. Not expected to occur on-site due to lack of suitable habitat and presumed extirpation.

Appendix C - Special Status Species Assessment Tables

Table 1. Special Status Plant Species with Potential to Occur at the Site

<i>Romneya coulteri</i>	Coulter's matilija poppy	None/None	4.2	Occurs in chaparral and coastal scrub, often in burns, typically in dry washes and canyons below 1,200 meters (approx. 3,950 feet) in elevation in the South Coast, western Transverse Ranges, and Peninsular Ranges. This plant has the largest flowers of any plant native to California. Perennial rhizomatous herb. Blooms March-July. Not expected at the Site based on species distribution and habitat requirements.
<i>Senecio aphanactis</i>	chaparral ragwort	None/None	2.2	Occurs in chaparral, cismontane woodland, and coastal scrub, sometimes alkaline soil, between approx. 15-800 meters (approx. 50-2,625 feet) in elevation. Known from 47 occurrences in California. It is unlikely that this species would occur at the Site based on species habitat requirements in relation to site conditions.
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	None/None	2B.2	Occurs in mesic habitat including alkaline springs and marshes in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas, generally below 1,500 meters (approx. 4,900 feet) in elevation in the South Coast, Western Transverse Ranges (potentially extirpated), San Gabriel Mountains, San Bernardino Mountains, Peninsular Ranges, and southwest Mojave Desert, to New Mexico and northern Mexico. There is no mesic habitat at the Site. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Sphenopholis obtusata</i>	prairie wedge grass	None/None	2B.2	Found in mesic habitat in cismontane woodland and in meadows and seeps between approx. 300-2,000 meters (approx. 980-6,560 feet). There is no mesic habitat at the Site. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	None/None	1B.2	Found near ditches, streams, springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernal mesic valley and foothill grassland below approx. 2,040 meters (6,700 feet) in elevation. Local records from near Lytle Creek northeast of the Site. There is no mesic habitat on-site. This species is not expected to occur at the Site based on species distribution and habitat requirements in relation to site conditions.

Federal/State Status Codes:

FE = Listed as Federally Endangered under Federal Endangered Species Act (FESA)  
CE = Listed as Endangered in California under California Endangered Species Act (CESA)  
FC = Candidate for listing under FESA  
SC = Candidate for listing under CESA

CNPS Rare Plant Ranks:

1A = California Rare Plant Rank 1A (formerly List 1A): Plants Presumed Extinct in California  
1B = California Rare Plant Rank 1B (formerly List 1B): Plants Rare, Threatened, or Endangered in California and Elsewhere  
2 = California Rare Plant Rank 2 (formerly List 2): Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere  
3 = California Rare Plant Rank 3 (formerly List 3): Plants About Which We Need More Information - A Review List  
4 = California Rare Plant Rank 4 (formerly List 4): Plants of Limited Distribution - A Watch List

Threat Ranks:

0.1 = Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)  
0.2 = Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)  
0.3 = Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Appendix C - Special Status Species Assessment Tables  
Table 2 – Special Status Wildlife Species with Potential to Occur at the Site

Scientific Name	Common Name	Federal/State Status	Primary Habitat Associations	Status On-site and Potential to Occur On-site
<b>BIRDS</b>				
<i>Agelaius tricolor</i>	Tricolored Blackbird	None/SSC (breeding)	This species is most numerous in the Central Valley. Requires open water, a protected nesting substrate, and foraging areas with insect prey within a few kilometers of the colony. Nests near fresh water, emergent wetland with cattails or tules; forages in grasslands, woodland, agriculture.	This species was not detected during the field investigation. Suitable nesting habitat is not present on-site. There is a low potential for this species to forage on-site if nesting in the vicinity. The nearest account of this species nesting was 1 mile west-southwest of Norco in the vicinity of Lake Narconian and the naval hospital (CDFW, 2015-a).
<i>Ammodramus savannarum</i>	Grasshopper Sparrow	None/SSC (breeding)	Occurs primarily in prairie and cultivated grasslands, weedy fallow fields, and alfalfa fields. Occupies intermediate grassland habitat, preferring drier sparse sites in tall grass prairies, with open or bare ground for feeding.	None detected on-site. Suitable foraging habitat is present on-site (agricultural field, disturbed areas); however, this species is highly vulnerable to mowing/clearing of fields. The croplands at the Site are cleared/tilled regularly and thus this species is not expected to nest on-site.
<i>Aquila chrysaetos</i>	Golden Eagle	None/FP, WL	Uncommon, permanent resident and migrant throughout California, except in the center of the Central Valley. Typically occurs in open country relatively far from people in grasslands, foothills, mountain areas, sage-juniper flats, desert habitats, coastal sage scrub, chaparral, oak savannas, open coniferous forest. Golden Eagles usually nest on cliffs. They may also build nests in trees, on the ground, or in human-made structures, including windmills, observation towers, nesting platforms, and electrical transmission towers. Constructed near hunting grounds, Golden Eagle nests often command a wide view of their surroundings.	Absent. This species was not detected during the field investigation and is not expected to occur at the Site based on site conditions, the species' habitat preferences, and the urban and disturbed nature of the Site.
<i>Asio otus</i>	Long-eared Owl	None/SSC (breeding)	This species prefers open woodlands; forest edges; riparian strips along rivers; hedgerows; juniper thickets; woodlots; wooded ravines and gullies. Breeding habitat must include thickly wooded areas for nesting and roosting with nearby open spaces for hunting.	Absent. This species was not detected during the field investigation and is not expected to occur to nest or forage at the Site based on site conditions. There is only one record in the vicinity; it is from 1925, 1.5 mile south of the north entrance to Carbon Canyon, Chino Hills (CDFW, 2015-a).
<i>Athene cunicularia</i>	Burrowing Owl	None/SSC (breeding)	Usually occupies ground squirrel burrows in open grassland, lowland scrub, coastal dunes, agricultural and range lands, railroad rights-of-way, margins of highways, golf courses, airports and other artificial open areas. Resident over most of southern California (sparsely distributed over desert areas).	Present. Two deceased individuals of this species were found during surveys for the species on 1/14/2016. The remains of the 2 deceased BUOW were turned over to CDFW warden Wardlow. No other individuals of BUOW were observed during the other surveys conducted prior to this observation or surveys following this observation. There is a high potential for this species to nest and/or forage on-site. There are 26 CNDDB records of BUOW nesting within 5 miles of the Site.
<i>Buteo regalis</i>	Ferruginous Hawk	FSC/CSC	A raptor of the open country of the West, the Ferruginous Hawk is the largest American hawk. Prefers open country, primarily prairies, plain and badlands, breeding in trees near streams or on steep slopes, sometimes on mounds in open desert. They may occur along streams or in agricultural areas in migration. Nests are placed in trees.	This species was not detected during the field investigation and it is not expected to nest on-site based on site condition and the species' habitat preferences. There is a low potential for this species to forage on-site during migration.
<i>Buteo swainsoni</i>	Swainson's Hawk	FSC/CT	Swainson's Hawks favor open habitats for foraging. Although much of their native prairie and grassland habitat has been converted to crop and grazing land, these hawks have adjusted well to agricultural settings. They forage in hay and alfalfa fields, pastures, grain crops, and row crops, and perch atop adjacent fence posts and overhead sprinkler systems. They often rely on scattered stands of trees near agricultural fields and grasslands for nesting sites.	Absent. This species was not detected during the field investigation and is not expected to occur on-site.
<i>Carduelis lawrencei</i>	Lawrence's Goldfinch	FSC/None	Open woodlands, chaparral, and weedy fields, typically near water. Nests are placed at mid-height in a tree.	This species was not observed during the field investigation. There is suitable nesting habitat on-site (trees) and there is a moderate potential for this species to forage on-site if nesting on-site or in the vicinity. There is a moderate potential for this species to occur on-site.
<i>Chondestes grammacus</i>	Lark Sparrow	FSC/None	Breeds in open habitats, where grass adjoins scattered trees and shrubs, especially in poor or sandy soils. Prefers park-like woodlands, mesquite grasslands, fallow fields with brushy edges, sagebrush. The nest is a thick-walled cup of grass, twigs, or weedy stems lined with finer grass or horse hair placed on the ground or in a shrub or small tree.	This species was not observed during the field investigation. There is suitable nesting habitat on-site (ground, shrubs, trees) and there is a moderate potential for this species to forage on-site if nesting on-site or in the vicinity. There is a moderate potential for this species to occur on-site.
<i>Circus cyaneus</i>	Northern Harrier	None/SSC	This species is a year-round resident of southern California. It nests on the ground in open areas such as grasslands and agricultural fields. It also forages in these habitats, but also forages in areas with low growing shrubs such as coastal sage scrub.	Present. This species was observed foraging on-site during the field investigation. There is suitable nesting and foraging habitat on-site.

Appendix C - Special Status Species Assessment Tables  
Table 2 – Special Status Wildlife Species with Potential to Occur at the Site

Scientific Name	Common Name	Federal/State Status	Primary Habitat Associations	Status On-site and Potential to Occur On-site
<i>Coccyzus americanus occidentalis</i>	Western Yellow-billed Cuckoo	Candidate/CE	Occurs along the broad, lower flood-bottoms of larger river systems. Preferred habitats are meandering riparian systems (primarily deciduous woods including willow and cottonwood) with healthy hydraulics that are constantly eroding and depositing and creating young riparian habitat. Nest heights can range from 3 feet to as much as 90 feet off the ground, with the nest placed on a horizontal branch or in the fork of a tree or large shrub. In the western U.S., nests are often placed in willows along streams and rivers, with nearby cottonwoods serving as foraging sites.	Absent. None detected on-site. Not expected to occur on-site due to lack of suitable habitat.
<i>Dendroica petechia brewsteri</i>	Yellow Warbler	None/SSC (breeding)	This species typically occurs in riparian or otherwise moist habitat with ample growth of small trees, in particular willows ( <i>Salix</i> sp.). Less preferred habitats include shrublands, farmlands and forest edges. Occasionally breeds in suburban or less densely settled areas, orchards, and parks.	Absent. This species was not detected during the field investigation and is not expected to occur at the site based on species distribution and habitat requirements. The nearest record is from 2000 in riparian habitat in Prado County Park at the Archibald Road crossing of the Santa Ana River, approx. 4 miles northwest of Corona.
<i>Elanus leucurus</i>	White-tailed Kite	FSC/SFP	Commonly found in savanna, open woodlands, marshes, desert grassland, partially cleared lands, and cultivated fields. Generally avoids areas with extensive winter freezes, but rainfall and humidity vary greatly throughout this bird's range. Hunts over lightly grazed or ungrazed fields where there may be larger prey populations than in more heavily grazed areas. White-tailed Kites typically nest in the upper third of trees that may be 10–160 feet tall. These can be open-country trees growing in isolation, or at the edge of or within a forest. Nests have been reported in more than 20 tree species.	Present. This species was observed foraging on-site during the previous field investigation for the 2015 Biological Assessment. However, this species was not observed during any of the surveys in 2016 and 2017. There is suitable nesting and foraging habitat for this species on-site.
<i>Empidonax traillii eximius</i>	Southwestern Willow Flycatcher	FE/CE	Dense riparian habitats along rivers, streams, or other wetlands. Vegetation dominated by dense growths of willows ( <i>Salix</i> sp.), mulefat ( <i>Baccharis</i> sp.), or other shrubs and medium-sized trees. There may be an overstory of cottonwood ( <i>Populus</i> sp.), tamarisk ( <i>Tamarix</i> sp.), or other large trees, but this is not always the case. Habitats dominated by tamarisk and Russian olive ( <i>Eleagnus angustifolia</i> ). One of the most important habitat characteristics appears to be the presence of dense vegetation, usually throughout all vegetation layers.	Absent. This species was not detected during the field investigation. Suitable habitat for this species is not present at the Site and therefore it is not expected to occur on-site.
<i>Eremophila alpestris actio</i>	California Horned Lark	None/SSC	Horned Larks favor bare, dry ground and areas of short, sparse vegetation; they avoid places where grasses grow more than a couple of inches high. Common habitats include prairies, deserts, tundra, beaches, dunes, and heavily grazed pastures. They also frequent areas cleared by humans, such as plowed fields and mowed expanses around airstrips. In wintertime, flocks of Horned Larks, often mixing with other birds of open ground, can be seen along roadsides, in feedlots, and on fields spread with waste grain and manure. At high altitudes and latitudes, they forage on snowfields in the late afternoon, though they mostly feed in areas free of snow. Horned Larks select nest sites on bare ground and use a natural depression or dig a shallow depression themselves.	This species was not observed during the field investigation. There is a moderate potential for this species to nest and forage on-site.
<i>Haliaeetus leucocephalus</i>	Southern Bald Eagle	None/CE	Bald Eagles typically nest in forested areas adjacent to large bodies of water, staying away from heavily developed areas when possible. Bald Eagles are tolerant of human activity when feeding, and may congregate around fish processing plants, dumps, and below dams where fish concentrate. For perching, Bald Eagles prefer tall, mature coniferous or deciduous trees that afford a wide view of the surroundings. In winter, Bald Eagles can also be seen in dry, open uplands if there is access to open water for fishing. They winter locally at deep lakes and reservoirs (mainly at Lake Mathews or Big Bear Lake).	Absent. This species was not detected during the field investigation and is not expected to occur at the Site based on site conditions, species distribution, and habitat requirements.
<i>Icteria virens</i>	Yellow-breasted Chat	None/SSC (breeding)	Riparian scrub, woodland, forest, and brush. Prefers woodland edges, dense vegetation including brambles and riparian thickets, and shrubby wet meadows. Nests are placed in dense shrubs. Nests are placed in dense shrubs.	Absent. This species was not detected during the field investigation and is not expected to occur at the Site based on site conditions, species distribution, and habitat requirements.

Appendix C - Special Status Species Assessment Tables  
Table 2 – Special Status Wildlife Species with Potential to Occur at the Site

Scientific Name	Common Name	Federal/State Status	Primary Habitat Associations	Status On-site and Potential to Occur On-site
<i>Lanius ludovicianus</i>	Loggerhead Shrike	FSC/SSC (breeding)	This species has been declining throughout the United States due to various reasons, including loss of habitat. This species prefers open country with short vegetation, scattered shrubs and low trees, it is also found in more heavily wooded habitats with large openings and in very short habitats with few or no trees. They frequent agricultural fields, pastures, old orchards, riparian areas, desert scrublands, savannas, prairies, golf courses, and cemeteries. Loggerhead Shrikes are often seen along mowed roadsides with access to fence lines and utility poles. It hunts in open or brushy areas from utility poles, fence posts, and other conspicuous perches, preying on insects, birds, lizards, and small mammals. Loggerhead Shrikes skewer their kills on thorns or barbed wire or wedge them into tight places for easy eating. They often build their nests in thorny vegetation, which may help keep predators away. They have been known to prefer nest placement in large shrubs such as ceanothus and lemonade berry in southern California. In the absence of trees or shrubs, they sometimes nest in brush piles or tumbleweeds. Average height of nests above the ground ranges from about 2.5 to 4 feet.	This species was not detected during the field investigation but there is a low potential for it to nest on-site. There is a moderate potential for this species to hunt on-site if nesting on-site or in the vicinity.
<i>Polioptila californica californica</i>	Coastal California Gnatcatcher	FT/SSC	Occurs in coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, and riparian areas in late summer. Occurs north of 30°N in nw Baja California, Mexico to Ventura County. Limited to lower elevations (<500m) south and west of Transverse and Peninsular Ranges. Highest densities occur in coastal areas of Orange and San Diego counties. Lower densities occur in western Riverside and southwestern San Bernardino counties and inland San Diego County. Small, now disjunct populations documented for Ventura and Los Angeles counties. Generally prefers open sage scrub (typically between 20 and 60 percent cover) with California sagebrush ( <i>Artemisia californica</i> ) as a dominant or co-dominant species. Dense sage scrub occupied less frequently than more open sites. More abundant near sage scrub-grassland interface than where sage scrub grades into chaparral. Dense sage scrub occupied less frequently than more open sites. Disturbances that reduce shrub cover such as frequent fire, mechanical disruption, livestock grazing, off-highway vehicle use, and military training activities appear to reduce habitat suitability for this species.	Absent. This species was not detected during the field investigation and is not expected to occur at the Site based on site conditions, species distribution, and habitat requirements.
<i>Vireo bellii pusillus</i>	Least Bell's Vireo	FE/CE	Moist riparian scrub, woodlands and forest predominantly composed of willow and mule fat. Vegetation characteristics of riparian stands between five to ten years of age are most suitable for nesting. Nests are suspended from forks of low branches of small trees or shrubs.	Absent. This species was not detected during the field investigation and is not expected to occur at the Site based on site conditions, species distribution, and habitat requirements.
<b>MAMMALS</b>				
<i>Antrozous pallidus</i>	Pallid Bat	None/SSC	Arid and semi-arid regions across much of the American west, up and down the coast from Canada and Mexico. A few isolated colonies have been found in northern Oklahoma and southern Kansas. Rocky outcroppings, to open, sparsely vegetated grasslands. Water must be available close by to all sites. They typically will use three different types of roosts. A day roost which can be a warm, horizontal opening such as in attics, shutters or crevices; the night roost is in the open, but with foliage nearby; and the hibernation roost which is often in buildings, caves, or cracks in rocks.	This species was not detected during the field investigation, but there are limited potential roosting locations at the Site. There is a moderate potential for this species to forage at the Site if it is roosting on-site or in the vicinity.
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego Pocket Mouse	None/SSC	Occurs in a variety of habitats, including coastal scrub, desert scrub, chaparral, grassland, and Riversidean alluvial fan sage scrub.	Absent. This species was not detected on-site and is not expected to occur on-site based on habitat requirements, species distribution and on-site conditions.
<i>Corynorhinus townsendii</i>	Townsend's Big-eared Bat	FSC/SCC	Occurs in a wide variety of habitats including woodlands and arid grasslands. Often roosts in mines and caves.	This species was not detected during the field investigation, and there are no preferred roosting locations and would not be expected to forage at the Site

Appendix C - Special Status Species Assessment Tables  
Table 2 – Special Status Wildlife Species with Potential to Occur at the Site

Scientific Name	Common Name	Federal/State Status	Primary Habitat Associations	Status On-site and Potential to Occur On-site
<i>Dipodomys merriami parvus</i>	San Bernardino Kangaroo Rat	FE/SSC	Occurs in alluvial sage scrub on alluvial fans, flood plains, along washes, in adjacent upland areas, and in areas with historic braided stream channels; these habitats characterized by sand, loam, sandy loam, or gravelly soils. Prefers the more open early and intermediate phases of alluvial sage scrub, but mature sage scrub is important as refugia during floods.	Absent. This species was not detected on-site and is not expected to occur on-site due to the lack of suitable habitat.
<i>Dipodomys stephensi</i>	Stephens' Kangaroo Rat	FE/CT	The geographic range of SKR includes the Anza, Perris, and San Jacinto Valleys and other areas of western Riverside and northwestern San Diego Counties. The vast majority of the SKR's range occurs in western Riverside Co., with the only other significant populations found at Camp Pendleton, the adjacent Fallbrook Naval Weapons Station, and sites around Lake Henshaw in northern San Diego Co. The species is not known from San Bernardino County. The vegetation most commonly associated with SKR includes coastal sagebrush, California buckwheat, and filaree ( <i>Erodium</i> species). SKR are typically found in transition areas, including grasslands that border coastal sage scrub, transition areas where sage scrub and grasslands are intermixed, areas of sparse sage scrub, and areas where native habitat has been removed or disturbed by agriculture and other uses. What each of these areas has in common is sparse, perennial vegetation covering less than 50% of the ground. Potentially suitable soils include those types capable of supporting annual grasses mixed with forbs and shrub species, and soils must exhibit compaction characteristics suitable for the establishment of burrows.	Absent. This species is not known from San Bernardino County. It is not expected to occur on-site based on known species distribution and site conditions.
<i>Eumops perotis californicus</i>	Western Mastiff Bat	None/SSC	Historically ranged throughout much of the southwestern United States and northwestern Mexico. In California, most records are from rocky areas at low elevations. Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in small colonies in cracks, crevices and small holes in vertical cliff faces, high buildings, trees, and tunnels throughout southwestern California. May prefer man-made structures including tall bridges. Foraging individuals wander widely.	This species was not detected during the field investigation, and there is no potential to roost on the property due to the relatively high levels of disturbance (e.g., night-time lighting, noise, ongoing agricultural operations, human and animal activity). There is a low potential for this species to forage at the Site if it is roosting in the vicinity.
<i>Lasiurus xanthinus</i>	Western Yellow Bat	None/SSC	Found in varied habitats from the southwestern United States to southern Mexico; often associated with palms and desert riparian habitats. In Southern California, occurs in palm oases and residential areas with untrimmed palm trees. Roosts primarily in trees, especially the dead fronds of palm trees, although it has also been documented to roost under the leaves of deciduous trees such as cottonwoods.	This species was not detected during the field investigation, but there is a low potential for it to roost at the Site (palm trees). There is a moderate potential for this species to forage at the Site if it is roosting on-site or in the vicinity.
<i>Lepus californicus bennettii</i>	San Diego Black-tailed Jackrabbit	None/SSC	Occurs in a variety of habitats including herbaceous and desert scrub areas, early stages of open forest, and chaparral. Most common in relatively open habitats. Restricted to the cismontane areas of Southern California, extending from the coast to the Santa Monica, San Gabriel, San Bernardino, and Santa Rosa Mountain ranges.	Absent. This species was not detected during the field investigation and is not expected to occur on-site based on the urban and disturbed nature of the Site.
<i>Myotis ciliolabrum</i>	Small-footed Myotis	FSC/None	Typically forages among trees or over brush; roosts in caves, mines, and in cliff or rock openings.	Absent. This species was not detected during the field investigation and it is not expected to roost or forage at the Site.
<i>Myotis yumanensis</i>	Yuma Myotis	FSC/SSC	Typically forages over water and wooded canyon bottoms; roosts in caves and abandoned buildings.	Absent. This species was not detected during the field investigation and there is no potential for it to roost or forage at the Site.
<i>Neotoma lepida intermedia</i>	San Diego Desert Woodrat	None/SSC	Occurs in coastal sage scrub, chaparral, cactus thickets, dense undergrowth, pinyon juniper woodland with rock outcrops.	Absent. This species was not detected on-site and is not expected to occur on-site due to known species distribution and on-site conditions in relation to species habitat preferences.
<i>Nyctinomops femorosaccus</i>	Pocketed Free-tailed Bat	None/SSC	The pocketed free-tailed bat inhabits the southwestern United States and northwestern Mexico. The bat has been seen in southern Arizona, southern California, southeastern New Mexico, western Texas, and into Mexico to the state of Michoacan. This species primarily inhabits semi-arid desertlands. Their roosts can be found in , and rock crevices. It is colonial and roosts primarily in crevices of rugged cliffs, caves, tunnels, mines, high rocky outcrops, crevices, and slopes. It has been found in a variety of habitats, including desert shrub and pine-oak forests. The species may also roost in buildings and under roof tiles.	Absent. The nearest records of this species are from Corona and Riverside in 1986 and 1988, respectively (one male and one female bat, respectively). This species was not detected on-site and it is not expected to roost or forage on-site.
<i>Nyctinomops macrotis</i>	Big Free-tailed Bat	None/SSC	Roosts mainly in crevices and rocks in cliff situations, although there is some documentation of roosts in buildings, caves, and tree cavities.	Absent. This species was not detected on-site and is not expected to occur on-site. The nearest species record is from Pomona in 1987 (one male bat).

Appendix C - Special Status Species Assessment Tables  
Table 2 – Special Status Wildlife Species with Potential to Occur at the Site

Scientific Name	Common Name	Federal/State Status	Primary Habitat Associations	Status On-site and Potential to Occur On-site
<i>Onychomys torridus ramona</i>	Southern Grasshopper Mouse	None/SSC	Typically occurs in open coastal sage scrub, mixed chaparral, and riparian areas.	Absent. This species was not detected on-site and is not expected to occur on-site due to lack of suitable habitat.
<i>Perognathus longimembris brevinasus</i>	Los Angeles Pocket Mouse	None/SSC	Occurs in coastal sage scrub; chaparral; desert scrub; lower elevation grassland; Riversidean alluvial fan sage scrub; playas and vernal pools. Typically occurs on open landscapes associated with alluvial, aeolian, or well-drained upland deposits of sandy soil. Historically occurred in the coastal basins of southern California, from San Fernando and Burbank in the San Fernando Valley east to Cabazon, south through the San Jacinto and Temecula Valleys to Aguanga, Warner Pass, Vail, and Temecula. The recorded elevational range is from 167 m (at Burbank) to 808 m (Oak Grove). The current range does not include the San Fernando Valley, the majority of which has been urbanized. There is potential for the species in the canyons of the San Fernando Valley (e.g., Tujunga wash), although no field surveys have apparently been conducted there. Currently, the western-most record for extant <i>P. brevinasus</i> is Etiwanda Wash. Apart from the San Fernando Valley, the outline of the current range of <i>P. brevinasus</i> is similar to its historic range. However, the species occurs sparingly in, or is absent from, many historic localities in the San Bernardino, San Jacinto, and Temecula valleys.	Absent. This species was not detected on-site and is not expected to occur on-site due to known species distribution and on-site conditions in relation to species habitat preferences.
<b>REPTILES</b>				
<i>Actinemys pallida</i>	Southwestern Pond Turtle	None/SSC	Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater.	Absent. This species was detected during the field investigation and is not expected to occur on-site based on site conditions in relation to habitat preferences. Not expected to occur in the abandoned dairy wastewater treatment pond.
<i>Anniella pulchra pulchra</i>	Silvery Legless Lizard	None/SSC	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.	Absent. This species was detected during the field investigation and is not expected to occur on-site based on site conditions in relation to habitat preferences.
<i>Aspidozelis hyperythra</i>	Orangethroat Whiptail	None/SSC	This species ranges from the Santa Ana River in Orange County, and near Colton in San Bernardino County, west of the Peninsular ranges, and south throughout the Baja Peninsula. It is found from sea level to approximately 610 meters (2,000 feet) in elevation in semi-arid brushy areas typically with loose soil and rocks, including washes, streambanks, rocky hillsides, and coastal chaparral.	Absent. This species was detected during the field investigation and is not expected to occur on-site based on its habitat preferences as well as the ongoing disturbances of the agricultural, nursery, and residential uses at the Site.
<i>Coleonyx variegatus abbotti</i>	San Diego Banded Gecko		This subspecies prefers rocky areas in coastal sage and chaparral. In California, <i>Coleonyx variegatus abbotti</i> is found in the interior southern coastal region, generally west of the Peninsular ranges and south of the Transverse ranges. This subspecies ranges beyond California south into Baja California to just north of the Viscaño Desert where it intergrades with the Mexican subspecies, <i>C. v. peninsularis</i> .	Absent. This species was not detected on-site and is not expected to occur on-site due to known species distribution and on-site conditions in relation to species habitat preferences. The nearest record is from 2003 in eastern Norco (one adult) in Coastal Sage Scrub habitat with numerous rock outcrops on granitic soils.
<i>Crotalus ruber</i>	Red-diamond Rattlesnake	None/SSC	Typically occurs in chaparral, coastal sage scrub, desert scrub, grassland, Riversidean alluvial fan sage scrub, woodlands and forest.	Absent. This species was detected during the field investigation and is not expected to occur on-site based on habitat requirements in relation to site conditions. The nearest record is from 2003 in northeastern Norco in disturbed transitional Diegan-Riversidean Coastal Sage Scrub.
<i>Emys marmorata</i>	Western Pond Turtle	None/SSC	Occurs in riparian scrub, woodlands and forest; requires water.	Absent. No suitable aquatic habitat to support this species is present at the Site, and thus it is not expected to occur on-site. The nearest records are from 1992 in Soquel Canyon Creek and Aliso Creek in Chino Hills State Park.
<i>Phrynosoma blainvillii</i>	Blainville's Horned Lizard (formerly known as the Coast Horned Lizard)	None/SSC	This species occurs in chaparral, coastal sage scrub, grassland, montane coniferous forest, riparian scrub, woodlands and forest, as well as Riversidean alluvial fan sage scrub. It prefers open country, especially sandy areas, washes, and floodplains. It requires open areas for sunning, shrubs for cover, patches of loose soil for burial, and an abundant supply of ants or other insects.	Absent. This species was not detected during the field investigation and is not expected to occur on-site based on habitat requirements in relation to site conditions.
<b>AMPHIBIANS</b>				



Appendix C - Special Status Species Assessment Tables  
Table 2 – Special Status Wildlife Species with Potential to Occur at the Site

Scientific Name	Common Name	Federal/State Status	Primary Habitat Associations	Status On-site and Potential to Occur On-site
<i>Anaxyrus californicus</i>	Arroyo Toad	FE/SSC	This species is endemic to California and northern Baja California. It ranges west of the desert in coastal areas, from the upper Salinas River system in Monterey county to northwestern Baja California. The arroyo toad has been recorded at six locations on the desert slope: the Mojave River, Little Rock Creek, Whitewater River, San Felipe Creek, Vallecito Creek, and Pinto Canyon. It inhabits washes, arroyos, sandy riverbanks, riparian areas with willows, sycamores, oaks, cottonwoods. It has extremely specialized habitat needs, including exposed sandy streambanks with stable terraces for burrowing with scattered vegetation for shelter, and areas of quiet water or pools free of predatory fishes with sandy or gravel bottoms without silt for breeding. Occurs below 3,000 ft. (~1,000 meters) in elevation.	Absent. No suitable aquatic habitat to support this species is present at the Site, and thus it is not expected to occur on-site.
<i>Lithobates pipiens</i>	Northern Leopard Frog	None/SSC	A variety of aquatic habitats that include slow-moving or still water along streams and rivers; wetlands; permanent or temporary pools; beaver ponds; and human-constructed habitats such as earthen stock tanks and borrow pits.	Absent. This species was not detected on-site during the field investigation and is not expected to occur on-site due to lack of aquatic habitat. The nearest record is from 1967 at Prado Dam (one individual).
<i>Taricha torosa</i>	Coast Range Newt		This species occurs in the Coast Ranges from central Mendocino County south to northern San Diego County. This species is found primarily in valley-foothill hardwood, coastal scrub and mixed chaparral, usually in or near mesic habitats.	Absent. This species was not detected on-site during the field investigation and is not expected to occur on-site due to lack of suitable habitat. The nearest record is from 1999 in sycamore/oak woodland with 90% cover (within Southern Coast Live Oak Riparian Forest) in Black Star Canyon southwest of Corona.
<b>FISH</b>				
<i>Catostomus santaanae</i>	Santa Ana Sucker	FT/SSC	This species is native to the Los Angeles, San Gabriel, and Santa Ana River systems. Santa Ana suckers are primarily found in small to medium sized streams that flow year-round and may vary in depth from several centimeters to over 1 meter deep. They favor cool (<22°C) flowing water where gravel, rubble, and boulder substrates are present. While Santa Ana suckers are commonly found in association with algae, they are not normally found among macrophytes. They use their scraping mouths to feed on algae and detritus, and may also feed on insects. The sucker's natal streams are subject to severe flooding, though these fish are well adapted to re-colonize through early maturity, high fecundity, and extended spawning. Santa Ana suckers rarely live more than four years but they reach sexual maturity in their second summer. Spawning occurs in gravelly riffles from mid-March until early June.	Absent. This species was not detected on-site during the field investigation and is not expected to occur on-site due to lack of aquatic habitat.
<i>Gila orcuttii</i>	Arroyo Chub	None/SSC	This species is limited to the coastal drainages of Southern California and is native to the Los Angeles, San Gabriel, Santa Ana, San Luis Rey, and Santa Margarita Rivers and Malibu and San Juan Creeks. They have been extirpated from much of their native range, but have been introduced to streams along the coast as far north as Chorro Creek in San Luis Obispo County. They have also been introduced to the Mojave River system where they have eliminated the Mojave tui chub. Arroyo chub are adapted to survive in cool to warm (10-24 deg Celsius) streams that fluctuate between large winter storm flows, and low summer flows, and the low dissolved oxygen and wide temperature fluctuations associated with this flow regime. They are most common in slow flowing or backwater areas with sand or mud substrate, but may also inhabit areas with velocities in excess of 80 cm/s over coarse substrate. They feed on plants such as algae and water fern (Azolla), and on invertebrates such as insects and mollusks. Spawning takes place in pools and edge habitat from February to August with a peak in June and July.	Absent. None detected on-site. None expected to occur on-site due to lack of aquatic habitat.
<i>Rhinichthys osculus ssp.</i>	Santa Ana Speckled Dace	None/SSC	The distribution of Santa Ana Speckled Dace is largely restricted to the headwaters of the Los Angeles, Santa Ana, and San Gabriel rivers. They are found mainly in perennial streams fed by cool springs that maintain summer water temperatures below 20 degrees Celsius, although speckled dace in other regions of the west tolerate temperatures of 26-28°C. Surveys of trout streams in the Los Angeles basin indicate that the dace occupy shallow riffles dominated by gravel and cobble. Their habitat in the West Fork of the San Gabriel River was described as shallow (average depths of 15-30 cm) gravel-cobble dominated riffles with overhanging riparian vegetation. However, their preferred habitat has also been characterized as pools of low-gradient streams (0.5-2.5% slope) with sand to boulder substrates in slow-moving waters, noting that they were also found in the stream margins of fast-moving water.	Absent. This species was not detected during the field investigation. No suitable aquatic habitat to support this species is present at the Site, and thus it is not expected to occur on-site.

Appendix C - Special Status Species Assessment Tables  
Table 2 – Special Status Wildlife Species with Potential to Occur at the Site

Scientific Name	Common Name	Federal/State Status	Primary Habitat Associations	Status On-site and Potential to Occur On-site
<div><b>Federal/State Status Codes:</b> FE = Federally Endangered under Federal Endangered Species Act (FESA) FT = Federally Threatened under Federal Endangered Species Act (FESA) CE = Endangered in California under California Endangered Species Act (CESA) CT = Threatened in California under California Endangered Species Act (CESA) FSC - Federal Species of Special Concern FP – California Department of Fish and Game Fully Protected Species SFP = State Fully Protected Species SSC – Species of Special Concern in California SCA - CDFW Special Animal in California WL – CDFW Watch List</div> <div><b>The “Status On-site and Potential to Occur at the Site” ranking is based on the following criteria:</b> Species Absent: The species was not detected during the site investigation or the species is restricted to habitats that do not occur at the site. Low Potential for Occurrence: No species records cite the species within the immediate vicinity (5 miles) or within the site boundaries, and/or the on-site habitat needed to support the species is of restricted size and/or poor quality. Moderate Potential for Occurrence: The habitat requirements associated with the species are present at the site and are of sufficient size and quality to support the species. High Potential for Occurrence: The habitat strongly associated with that species is present at the site. Species Present: The species was observed at the site at the time of the site investigation.</div>				

## **APPENDIX D**

### **Compendia Plant and Animal Species**

Appendix D

Table 1. Plant Species Detected at the Site

Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name	Native/Non-native
Adoxaceae	Elderberry Family			
		<i>Sambucus nigra</i>	Mexican elderberry	native
Agavaceae	Agave Family			
		<i>Agave attenuata</i>	foxtail agave	non-native
		<i>Yucca gloriosa</i>	Spanish dagger	non-native
Aizoaceae	Fig-marigold Family			
		<i>Aptenia cordifolia</i>	red apple ice plant	non-native
		<i>Lampranthus</i> sp.	horticultural ice plant species	non-native
		<i>Trianthema portulacastrum</i>	Horse purslane	native
Amaranthaceae	Amaranth Family			
		<i>Amaranthus albus</i>	tumbling pigweed	non-native
		<i>Amaranthus blitoides</i>	prostate pigweed	native
		<i>Amaranthus hybridus</i>	slender amaranth	non-native
		<i>Amaranthus palmeri</i>	Palmer's pigweed	native
		<i>Amaranthus retroflexus</i>	rough pigweed	non-native
Anacardiaceae	Sumac Family			
		<i>Schinus molle</i>	Peruvian pepper tree	non-native
Apocynaceae	Dogbane Family			
		<i>Vinca major</i>	greater periwinkle	non-native
		<i>Asclepias fascicularis</i>	narrow-leaf milkweed	native
Arecaceae	Palm Family			
		<i>Syagrus romanzoffiana</i>	queen palm	non-native
		<i>Washingtonia filifera</i>	California fan palm	native to California, but planted as a horticultural specimen on-site
		<i>Washingtonia robusta</i>	Mexican fan palm	non-native
Asphodelaceae	Asphodel Family			
		<i>Phormium tenax</i>	New Zealand flax	non-native
Asteraceae	Sunflower Family			
		<i>Baccharis pilularis</i>	coyote brush	native (planted as ornamental)
		<i>Baccharis salicicina</i>	Emory's baccharis	native
		<i>Baccharis salicifolia</i> subsp. <i>salicifolia</i>	mule fat	native
		<i>Carduus pycnocephalus</i>	Italian thistle	non-native
		<i>Cirsium vulgare</i>	bull thistle	non-native
		<i>Erigeron bonariensis</i>	flax-leaved horseweed	non-native
		<i>Erigeron canadensis</i>	common horseweed	native
		<i>Gazania linearis</i>	gazania	non-native
		<i>Helminthotheca echioides</i>	bristly ox-tongue	non-native
		<i>Heterotheca grandiflora</i>	telegraph weed	native
		<i>Lactuca serriola</i>	prickly lettuce	non-native
		<i>Osteospermum fruticosa</i>	freeway daisy	non-native
		<i>Pseudognaphalium californicum</i>	California everlasting	native
		<i>Pseudognaphalium luteoalbum</i>	cudweed	non-native
		<i>Senecio vulgaris</i>	Common groundsel	non-native

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Table 1. Plant Species Detected at the Site

Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name	Native/Non-native
		<i>Silybum marianum</i>	milk thistle	non-native
		<i>Sonchus asper</i> subsp. <i>asper</i>	prickly sow thistle	non-native
		<i>Sonchus oleraceus</i>	common sow thistle	non-native
		<i>Symphyotrichum subulatum</i> var. <i>parviflorum</i>	slender aster	native
		<i>Taraxacum officinale</i>	common dandelion	non-native
		<i>Verbesina encelioides</i> subsp. <i>exauriculata</i>	earless crown beard	non-native
		<i>Xanthium spinosum</i>	spiny cocklebur	non-native
		<i>Xanthium strumarium</i>	cocklebur	non-native
<i>Bignoniaceae</i>	Trumpet-creeper Family			
		<i>Jacaranda mimosifolia</i>	jacaranda tree	non-native
		<i>Tecoma capensis</i>	Cape honeysuckle	non-native
<i>Boraginaceae</i>	Borage or Waterleaf Family			
		<i>Amsinckia intermedia</i>	common fiddleneck	native
		<i>Amsinckia reterosa</i>	gray fiddleneck	native
		<i>Heliotropium curassavicum</i> var. <i>oculatum</i>	alkali heliotrope	native
<i>Brassicaceae</i>	Mustard Family			
		<i>Capsella bursa-pastoris</i>	shepherd's purse	non-native
		<i>Lepidium didymus</i>	swine grass	non-native
		<i>Lepidium latifolium</i>	perennial peppergrass	non-native
		<i>Raphanus sativus</i>	radish	non-native
		<i>Sisymbrium irio</i>	London rocket	non-native
<i>Cactaceae</i>	Cactus Family			
		<i>Opuntia ficus-indica</i>	Babary fig	non-native
<i>Caryophyllaceae</i>	Pink Family			
		<i>Stellaria media</i>	common chickweed	non-native
<i>Chenopodiaceae</i>	Goosefoot Family			
		<i>Atriplex argentea</i> ssp. <i>Expansa</i>	Mojave silver scale	native
		<i>Atriplex rosea</i>	redscale	non-native
		<i>Atriplex semibaccata</i>	Australian saltbush	non-native
		<i>Atriplex serenana</i> var. <i>serenana</i>	bracted saltscale	non-native
		<i>Atriplex suberecta</i>	serrate-leaved saltbush	non-native
		<i>Bassia hyssopifolia</i>	five-hook bassia	non-native
		<i>Chenopodium album</i>	lamb's quarters	non-native
		<i>Chenopodium murale</i>	nettle-leaved goosefoot	non-native
		<i>Kochia scoparia</i> subsp. <i>scoparia</i>	summer cypress	non-native
		<i>Salsola tragus</i>	Russian thistle	non-native
<i>Convolvulaceae</i>	Morning-Glory Family			
		<i>Convolvulus arvensis</i>	bindweed	non-native
		<i>Cuscuta campestris</i>	western field dodder	native
<i>Cupressaceae</i>	Cypress Family			
		<i>Juniperus chinensis</i> 'Torulosa'	Hollywood twisted juniper	non-native
		<i>Thuja</i> sp.	horticultural arborvitae species	non-native
<i>Cyperaceae</i>	Sedge Family			
		<i>Cyperus rotundus</i>	purple nut grass	non-native

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Table 1. Plant Species Detected at the Site

Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name	Native/Non-native
<i>Euphorbiaceae</i>	Spurge Family			
		<i>Croton setigerus</i>	turkey-mullein	non-native
		<i>Euphorbia maculata</i>	spotted spurge	non-native
		<i>Euphorbia serpens</i>	annual rattlesnake weed	non-native
<i>Fabaceae</i>	Pea Family			
		<i>Acacia longifolia</i>	golden wattle	non-native
		<i>Acacia sp.</i>	Acacia	non-native
		<i>Albizia julibrissin</i>	silk tree	non-native
		<i>Medicago sativa</i>	alfalfa	non-native
		<i>Melilotus albus</i>	white sweetclover	non-native
		<i>Melilotus indicus</i>	yellow sweetclover	non-native
		<i>Robinia pseudoacacia</i>	black locust	non-native
<i>Geraniaceae</i>	Geranium Family			
		<i>Erodium cicutarium</i>	red-stemmed filaree	non-native
<i>Lamiaceae</i>	Mint Family			
		<i>Marrubium vulgare</i>	horehound	non-native
		<i>Rosmarinus officinalis</i>	rosemary	non-native
		<i>Salvia leucantha</i>	Mexican sage	non-native
<i>Malvaceae</i>	Mallow Family			
		<i>Abutilon theophrasti</i>	velvet leaf	non-native
		<i>Malva nicaeensis</i>	bull mallow	non-native
		<i>Malva parviflora</i>	cheeseweed	non-native
<i>Moraceae</i>	Mulberry Family			
		<i>Morus alba</i>	white mulberry	non-native
<i>Myrtaceae</i>	Myrtle Family			
		<i>Eucalyptus camaldulensis</i>	river red gum	non-native
<i>Oleaceae</i>	Olive Family			
		<i>Fraxinus uhdei</i>	shamel ash	non-native
		<i>Jasminum sp.</i>	horticultural jasmine species	non-native
		<i>Ligustrum sp.</i>	horticultural privet species	non-native
<i>Plantaginaceae</i>	Plantain Family			
		<i>Veronica persica</i>	Persian speedwell	non-native
<i>Plantanaceae</i>	Sycamore Family			
		<i>Platanus x hispanica</i>	London plane tree	non-native
<i>Poaceae</i>	Grass Family			
		<i>Avena barbata</i>	slender wild oat	non-native
		<i>Avena fatua</i>	wild oat	non-native
		<i>Bromus catharticus</i>	rescue grass	non-native
		<i>Bromus diandrus</i>	ripgut grass	non-native
		<i>Bromus madritensis</i> subsp. <i>rubens</i>	red brome	non-native
		<i>Cynodon dactylon</i>	Bermuda grass	non-native
		<i>Echinochloa crus-galli</i>	barnyard grass	non-native
		<i>Erharta erecta</i>	panic veldt grass	non-native
		<i>Eleusine indica</i>	goose grass	non-native

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Table 1. Plant Species Detected at the Site

Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name	Native/Non-native
		<i>Hordeum murinum</i> subsp. <i>leporinum</i>	foxtail barley	non-native
		<i>Hordeum vulgare</i>	cultivated barley	non-native
		<i>Leptochloa fusca</i> subsp. <i>uninervia</i>	Mexican sprangletop	native
		<i>Pennisetum clandestinum</i>	kikuyu grass	non-native
		<i>Phalaris minor</i>	little-seed canary grass	non-native
		<i>Poa annua</i>	annual blue grass	non-native
		<i>Polypogon monspeliensis</i>	rabbit's foot grass	non-native
		<i>Schismus barbatus</i>	Mediterranean schismus	non-native
		<i>Setaria adherens</i>	bur bristle grass	non-native
		<i>Setaria viridis</i>	green bristle grass	non-native
		<i>Sorghum bicolor</i>	sorghum	non-native
		<i>Sorghum halepense</i>	Johnson grass	non-native
		<i>Stipa miliacea</i> var. <i>miliacea</i>	smilo grass	non-native
		<i>Triticum aestivum</i>	wheat	non-native
		<i>Zea mays</i>	agricultural corn	non-native
<i>Polygonaceae</i>	Buckwheat Family			
		<i>Persicaria lapathifolia</i>	willow smartweed	native
		<i>Polygonum avicular</i>	common knotweed	non-native
		<i>Polygonum argeocoleon</i>	Persian knotweed	non-native
		<i>Rumex crispus</i>	curly dock	non-native
<i>Plumbaginaceae</i>	Leadwort Family			
		<i>Plumbago auriculata</i>	plumbago	non-native
<i>Portulacaceae</i>	Purslane Family			
		<i>Portulaca oleracea</i>	common purslane	non-native
<i>Rosaceae</i>	Rose Family			
		<i>Photinia fraseri</i>	Fraser's photinia	non-native
		<i>Prunus caroliniana</i>	Carolina cherry	non-native
		<i>Prunus persica</i>	peach tree	non-native
		<i>Rhaphiolepis indica</i>	India hawthorn	non-native
		<i>Rosa</i> sp.	horticultural rose species	non-native
<i>Rubiaceae</i>	Madder Family			
		<i>Galium aparine</i>	common bedstraw	non-native
<i>Salicaceae</i>	Willow Family			
		<i>Salix lasiolepis</i> (seedling)	Arroyo willow	native
		<i>Salix</i> sp.	ornamental willow	non-native
<i>Scrophulariaceae</i>	Figwort Family			
		<i>Myoporum laetum</i>	myoporum	non-native
		<i>Myoporum parviflorum</i>	dwarf myoporum	non-native
<i>Simaroubaceae</i>	Quassia or Simarouba Family			
		<i>Ailanthus altissima</i>	tree of heaven	non-native
<i>Solanaceae</i>	Nightshade Family			
		<i>Datura stramonium</i>	Jimson weed	non-native
		<i>Lycopersicon esculentum</i>	tomato	non-native
		<i>Nicotiana glauca</i>	tree tobacco	non-native

Appendix D

Table 1. Plant Species Detected at the Site

Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name	Native/Non-native
		<i>Physalis philadelphica</i>	Tomatillo	non-native
		<i>Solanum americanum</i>	white nightshade	non-native
		<i>Solanum elaeagnifolium</i>	silver-leaf horse nettle	non-native
		<i>Solanum physalifolium</i> var. <i>nitidibaccatum</i>	hairy nightshade	non-native
<i>Tamaricaceae</i>	Tamarisk Family			
		<i>Tamarix ramosissima</i>	saltcedar	non-native
<i>Typhaceae</i>	Cattail Family			
		<i>Typha domingensis</i>	southern cattail	native
		<i>Typha latifolia</i>	broad-leaved cattail	native
<i>Ulmaceae</i>	Elm Family			
		<i>Ulmus parvifolia</i>	Chinese elm	non-native
<i>Urticaceae</i>	Nettle Family			
		<i>Urtica urens</i>	dwarf nettle	non-native
<i>Vitaceae</i>	Grape Family			
		<i>Parthenocissus inserta</i>	woodbine	non-native
<i>Xanthorrhoeaceae</i>	Grass tree Family			
		<i>Phormium tenax</i>	flax	non-native
<i>Zygophyllaceae</i>	Caltrop Family			
		<i>Tribulus terrestris</i>	puncture vine	non-native



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Table 2. Animal Species Detected at the Site

Scientific Name - Class	Common Name - Class	Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name
Aves	Birds				
		Accipitridae	Hawks and Eagles		
				<i>Accipiter cooperii</i>	Cooper's Hawk
				<i>Accipiter striatus</i>	Sharp-shinned Hawk
				<i>Buteo jamaicensis</i>	Red-tailed Hawk
				<i>Circus cyaneus</i>	Northern Harrier
		Aegithalidae	Long-tailed Tits		
				<i>Psaltirparus minimus</i>	Bushtit
		Anatidae	Ducks, Geese & Swans		
				<i>Anas platyrhynchos</i>	Mallard
				<i>Branta canadensis</i>	Canada Goose
		Ardeidae	Bitterns, Herons, and Allies		
				<i>Ardea alba</i>	Great Egret
		Cardinalidae	Cardinals, Grosbeaks & allies		
				<i>Passerina caerulea</i>	Blue Grosbeak
		Cathartidae	New World Vultures		
				<i>Cathartes aura</i>	Turkey Vulture
		Charadriidae	Plovers, Dotterels, and Lapwings		
				<i>Charadrius vociferous</i>	Killdeer
		Columbidae	Pigeons and Doves		
				<i>Columba livia</i>	Rock Dove
				<i>Streptopelia decaocto</i>	Eurasian Collared-Dove
				<i>Zenaida macroura</i>	Mourning Dove
		Corvidae	Jays, Magpies, and Allies		
				<i>Corvus brachyrhynchos</i>	American Crow
				<i>Corvus corax</i>	Common Raven
		Emberizidae	Sparrows and Allies		
				<i>Melospiza melodia</i>	Song Sparrow
				<i>Passerculus sandwichensis</i>	Savannah sparrow
				<i>Pipilo maculatus</i>	Spotted Towhee
				<i>Zonotrichia leucophrys</i>	White-crowned Sparrow
		Falconidae	Falcons		
				<i>Falco sparverius</i>	American Kestrel
		Fringillidae	Finches		
				<i>Carduelis psaltria</i>	Lesser Goldfinch
				<i>Carpodacus mexicanus</i>	House Finch
		Hirundinidae	Swallows and Martins		
				<i>Hirundo rustica</i>	Barn Swallow
				<i>Petrochelidon pyrrhonota</i>	Cliff swallow
				<i>Stelgidopteryx serripennis</i>	Northern Rough-winged Swallow
				<i>Tachycineta bicolor</i>	Tree Swallow
		Icteridae	Blackbirds, Orioles and Allies		

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Table 2. Animal Species Detected at the Site

Scientific Name - Class	Common Name - Class	Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name
				<i>Agelaius phoeniceus</i>	Red-winged blackbird
				<i>Euphagus cyanocephalus</i>	Brewer's Blackbird
				<i>Icterus cucullatus</i>	Hooded Oriole
				<i>Molothrus ater</i>	Brown-headed cowbird
				<i>Quiscalus mexicanus</i>	Great-tailed Grackle
				<i>Sturnella neglecta</i>	Western Meadowlark
		<i>Mimidae</i>	Mimids		
				<i>Mimus polyglottos</i>	Northern Mockingbird
		<i>Motacillidae</i>	Pipits & Wagtails		
				<i>Anthus rubescens</i>	American Pipit
		<i>Passeridae</i>	Old World Sparrows		
				<i>Passer domesticus</i>	House Sparrow
		<i>Phalacrocoracidae</i>	Cormorants		
				<i>Phalacrocorax auritus</i>	Double-crested Cormorant
		<i>Parulidae</i>	New World Warblers		
				<i>Setophaga coronata</i>	Yellow-rumped Warbler
		<i>Strigidae</i>	Owls		
				<i>Athene cunicularia</i> (deceased)	Burrowing Owl
		<i>Sturnidae</i>	Starlings		
				<i>Sturnus vulgaris</i>	European Starling
		<i>Threskiornithidae</i>	Ibises & Spoonbills		
				<i>Plegadis chihi</i>	White-faced Ibis
		<i>Tyrannidae</i>	Tyrant Flycatchers		
				<i>Sayornis nigricans</i>	Black Phoebe
				<i>Sayornis saya</i>	Say's Phoebe
				<i>Tyrannus verticalis</i>	Western Kingbird
<i>Insecta</i>	Insects				
		<i>Acrididae</i>	Grasshoppers		
				<i>Trimerotropis pallidipennis</i>	Pallid-winged Grasshopper
		<i>Aeshnidae</i>	Darners		
				<i>Aeshna multicolor</i>	Blue-eyed Darner
				<i>Anax junius</i>	Green Darner
		<i>Apidae</i>	Bees		
				<i>Apis mellifera</i>	European Honey Bee
				<i>Bombus pensylvanicus</i>	American Bumblebee
		<i>Calliphoridae</i>	Various Flies		
				<i>Phaenicia sericata</i>	Greenbottle Fly
		<i>Coccinellidae</i>	Ladybugs		
				<i>Hippodamia convergens</i>	Convergent Ladybug Beetle
		<i>Hesperiinae</i>	Skippers		
				<i>Hylephila phyleus</i>	Fiery Skipper
		<i>Muscidae</i>	Muscid Flies		

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Table 2. Animal Species Detected at the Site

Scientific Name - Class	Common Name - Class	Scientific Name - Family	Common Name - Family	Scientific Name - Genus and Species	Common Name
				<i>Musca domestica</i>	House Fly
		<i>Nymphalidae</i>	Brush-footed butterflies		
				<i>Nymphalis antiopa</i>	Mourning Cloak
		<i>Pieridae</i>	Whites, Sulphurs, Yellows		
				<i>Colias eurytheme</i>	Alfalfa Butterfly
				<i>Pieris rapae</i>	European Cabbage White
<i>Mammalia</i>	Mammals				
		<i>Bovidae</i>	Bovids		
				<i>Capra aegagrus hircus</i>	Domestic Goat
				<i>Ovis aries</i>	Domestic Sheep
		<i>Canidae</i>	Canids		
				<i>Canis latrans</i>	Coyote
				<i>Canis lupus familiaris</i>	Domestic Dog
		<i>Equidae</i>	Horses		
				<i>Equus ferus caballus</i>	Domestic Horse
		<i>Felidae</i>	Cats		
				<i>Felis catus domestica</i>	Domestic Cat
		<i>Geomyidae</i>	Gophers		
				<i>Thomomys bottae</i>	Botta's Pocket Gopher
		<i>Leporidae</i>	Rabbits and Hares		
				<i>Sylvilagus bachmani</i>	Brush Cottontail
		<i>Muridae</i>	Rats, Mice, etc		
				<i>Mus musculus</i>	House Mouse
		<i>Mustelidae</i>	Weasels		
				<i>Mustela frenat</i>	Long-tailed Weasel
		<i>Sciuridae</i>	Squirrels and Allies		
				<i>Otospermophilus beecheyi</i>	California Ground Squirrel
<i>Reptilia</i>	Reptiles				
		<i>Colubridae</i>	Snakes		
				<i>Pituophis catenifer</i>	Gopher Snake
		<i>Phrynosomatidae</i>	Phrynosomatid Lizards		
				<i>Sceloporus occidentalis</i>	Western Fence Lizard