BIOLOGICAL TECHNICAL REPORT

FOR PORTIONS OF

THE ARMSTRONG RANCH SPECIFIC PLAN

TENTATIVE TRACT 19966

(CVRC Ontario Investment, LLC Properties and Off-site Improvement Lands)

LOCATED IN THE CITY OF ONTARIO, SAN BERNARDINO, CALIFORNIA

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August 19, 2015

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INFORMATION SUMMARY

A. Report Date: August 19, 2015

B. Report Title: Biological Technical Report for portions of the Armstrong Ranch Specific Plan, Tentative Tract 19966 *(CVRC Ontario Investment, LLC Properties and Off-site Improvement Lands)*

C. Project Site Location: City of Ontario, San Bernardino County, California

D. Owner/Applicant: CVRC Ontario Investments

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F. Report Summary: Two biological reports were performed for the Armstrong Ranch Specific Plan (Specific Plan) Project, *located in the City of Ontario, San Bernardino County, California. The Project consists of the Specific Plan area, which is approximately 199 acres of land, and approximately 7.5 acres of associated potential off-site improvement plans* (Project). As illustrated in Exhibit 3, this report addresses the impacts associated with the development of the "Project site", which consists of approximately 145.7 acres, including lands controlled by CVRC covered by *the Specific Plan and* proposed Tentative Tract 19966, approximately 138.2 acres (on-site), and associated potential off-site improvement lands, consisting of approximately 7.5 acres.

In order to better address the biological impacts expected to occur in connection with development of the Project, the second report prepared simultaneously with this report evaluates biological resources for the remaining lands within the Armstrong Specific Plan, which are not controlled by CVRC.

The Project, including the Project site, would consist of a residential community, including a school, on approximately 199 acres of land, as well as associated off-site road improvements on approximately 7.5 acres. This report discloses the impacts associated with development of the Project site, by describing the results of a field study performed to evaluate the potential occurrence of biological resources and the requirements triggered by environmental laws and regulations. Habitat assessments were performed for special-status plants and animals and a jurisdictional waters evaluation was conducted. There is no potential for special-status plants to be present, and thus development of the Project site will not generate any significant impacts to special-status plants. The single jurisdictional water resource located on the off-site lands of the Project site, the, Cucamonga Creek Flood Control Channel, will be avoided in connection with Project development, and thus there are no significant impacts to jurisdictional waters. The Project site provides little value to biological resources. There is potential for several special-status birds (white-tailed kite, loggerhead shrike) to be present but these potential impacts are considered to be less than significant under CEQA. The Project site does not support burrowing owl. With

implementation of avoidance measures presented in Section 6.1 of this report, direct impacts to burrowing owl would be avoided and thus potential impacts to this species would be less than significant under CEQA. A focused habitat evaluation was also performed for Delhi sands flower-loving fly and the Project site is not suitable for the species. There is no potential for any federal or state listed species to be present on the Project site, and thus there are no significant impacts which will be generated by development of the Project site.

G. Individuals Conducting Fieldwork: Martin Rasnick, Tricia Campbell, Jeff Ahrens, David Smith, and Scott Cameron (Ecological Sciences, Inc.).

TABLE OF CONTENTS

TABLES

FIGURES

EXHIBITS - Attached

APPENDICES - Attached

1.0 INTRODUCTION

1.1 Background and Scope of Work

This report provides the results of general biological surveys and focused biological surveys for the Project site. For this report, the term *Specific Plan Area* is defined as the entire 206.5 acres of land, including off-site improvements while the term *Project site* is defined as the portion of the Specific Plan Area controlled by CVRC within Tentative Tract 19966 (138.2 acres) and the off-site improvements. Off-site improvements total approximately 7.5 acres. A separate report evaluates biological resources for the remaining lands within the Specific Plan area, which are not controlled by CVRC. The Project (and the Project site) is located in the City of Ontario, San Bernardino County, California [Exhibits 1 and 2]. This report identifies and evaluates potential impacts to biological resources associated with the development of the Project site in the context of the California Environmental Quality Act (CEQA), State and Federal regulations such as the Endangered Species Act (ESA), the federal Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act (State Water Code), and the State Fish and Game Code.

The scope of this report includes a discussion of existing conditions on the Project site, all methods employed regarding the potential jurisdictional resources evaluation, general biological surveys and focused biological surveys, the documentation of botanical and wildlife resources identified (including any special-status species), and an analysis of potential impacts to biological resources. Methods of study included a review of relevant literature, field surveys, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

The field study focused on the following objectives to comply with CEQA requirements, including (1) general reconnaissance surveys and vegetation mapping; (2) a general biological survey; (3) habitat assessments for special-status plant and wildlife species; (4) a focused survey for burrowing owl (*Athene cunicularia*); (5) a focused habitat assessment for Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*); (6) an analysis of biological impacts; and (7) an analysis of potential impacts to U.S. Army Corps of Engineers, CDFW, and Santa Ana Regional Water Quality Control Board (Regional Board) jurisdictional waters in Cucamonga Creek. Observations of all plant and wildlife species were recorded during the field study visits and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

1.2 Project Location

The Specific Plan comprises approximately 206.5 acres of lands (including off-site improvements) in the City of Ontario, San Bernardino County, California [Exhibit 1 – Regional Map] and is located west of the Cucamonga Creek Flood Control Channel, east of the proposed Vineyard Avenue extension, south of Riverside Drive, and north of Chino Avenue. The site occurs within Section 10, Township 2 South, and Range 7 West, San Bernardino Baseline and Meridian, on the Guasti U.S. Geological Survey (USGS) 7.5" quadrangle map [Exhibit 2 –

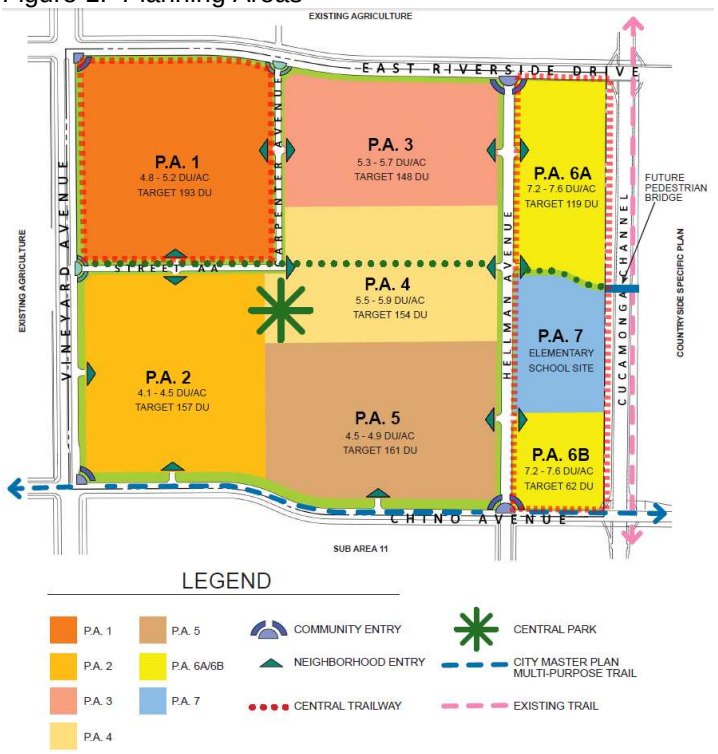
Vicinity Map]. Existing land uses on adjacent lands include active and inactive dairy agriculture, golf course, residential, and commercial.

1.3 Project Description

As illustrated in Exhibit 3, this report addresses the impacts associated with the development of a portion of the Specific Plan, called *Project site*. Specifically approximately 145.7 acres, including lands controlled by CVRC covered by proposed Tentative Tract 19966 (Planning Areas 2 thru 5; approximately 138.2 acres) and associated potential off-site improvement lands, consisting of approximately 7.5 acres.

In order to better address the biological impacts expected to occur in connection with development of the remainder of the Specific Plan, a second report[1] prepared simultaneously with this report evaluates biological resources for the remaining lands (Planning Areas 1, 6, and 7) within the Armstrong Specific Plan, which are not controlled by CVRC (Figure 1, red dash areas, *PAs 1, 6 and 7*).

Figure 1. Planning Areas



The Specific Plan allows for the development of up to 994 residential dwelling units comprised of a variety of single-family detached homes dwellings. Residential land use areas are contained within seven distinctive neighborhood Planning Areas (PAs) linked by a network of street-separated sidewalks and bicycle trails connecting all neighborhoods to parks and off-property trail systems.

The Specific Plan permits flexibility in the distribution of residential types within each residential PA. A maximum number of dwelling units for each PA are established as described in Table 1-1, below. The residential home types described in the Specific Plan are permitted for development within any PA. The total number of residential dwelling units developed within each PA may be exceeded by up to 15% of the maximum number of dwelling units established for the PA, provided the total number of dwelling units developed within the project does not exceed 994. The specific residential type and mix of types

[1] Glenn Lukos Associates 2015. Biological Technical Report for the Armstrong Ranch Specific Plan (Remaining lands – Non CVRC Ontario Investment, LLC Properties), Located in the City of Ontario, San Bernardino, California. Prepare for John Condas at Allens Matkins Leck Gamble Mallory & Natsis, LLP. Dated August 2015.

to be developed in each PA will be determined at the time of tentative tract map approval by the City of Ontario for each development project within Armstrong Ranch. As shown in Table 1-1, 620 dwellings are proposed for development within the Project site. The remaining 374 of the 994 dwellings are proposed for PAs 1, 6, and 7 (potential school site).

Off-site improvements
The proposed road improvements to Chino Avenue would involve improving the existing bridge crossing of Chino Avenue over the Cucamonga Creek Flood Control Channel. There will be no temporary or permanent structures placed in the channel or its side walls as part of bridge improvements. Any proposed improvements would clear span the channel. Other off-site improvements include street widening and trails along South Ontario Avenue and the extension of Vineyard Avenue north to East Riverside Drive.

Table 1-1. Land Use Plan Summary

Land Use Residential Single Family	**Gross Acres (ac.)**	**Net Acres (ac.)**	**Dwelling Units (DU)**	**Gross Density (DU/ac.)**	**Net Density (DU/ac.)**
PA 1	38.6	33.0	193	5.0	5.8
PA 2	36.2	32.5	157	4.3	4.8
PA 3	26.8	24.6	148	5.5	6.0
PA 4	26.9	26.9	154	5.7	5.7
PA 5	34.2	32.6	161	4.7	4.9
PA 6	24.5	21.0	181	7.4	8.6
PA 7	11.6	10.0	0	0.0	0.0
Roadways		10.6			
Enhanced Neighborhood Edges		7.6			
Total	198.8 ac.	198.8 ac.	994	5.0 DU/ac.	5.5 DU/ac.

1.4 Existing Conditions

The Specific Plan Area, including all on-site and off-site lands, is composed of open lands used for dairy farming (including feeding and spreading grounds), crops, equestrian (corrals), trucking yard(s), abandoned farm lands, and the Cucamonga Creek Flood Control Channel (along the east boundary). A few single-family rural residential homes occur along East Riverside Drive, South Ontario Avenue, and Chino Avenue. Soil surfaces reflect past and ongoing manipulation to support past and present agricultural uses. Manure is present throughout much of the Specific Plan Area. A dense layer of exotic grasses generally cover the pasturelands and manure spreading areas. Cattle feeding areas consist of mostly barren ground covered in manure. The Project site is similar to the Specific Plan Area, but without equestrian use or trucking yards.

Ground topography for both the Specific Plan Area and the Project site is shallow and the slope is slight, with the southernmost portion of the Project site at about 750 feet and the northernmost portion at about 775 feet elevation. Soils are mapped as Delhi Fine Sand and Hilmar Loamy Fine Sand [Exhibit 4 - Soils] by the Natural Resource Conservation Service (NRCS). Fieldwork observations do not conflict with this mapping.

No natural or semi-natural vegetation communities are present and vegetation on the Specific Plan Area, including the Project site, included various non-native grasses and weedy species.

The Specific Plan Area and the Project site support biological resources conducive/adapted to highly degraded and manipulated landscapes. The Cucamonga Creek Flood Control Channel is a federal and state jurisdictional water that is fully concrete-lined (concrete-bottom and concrete-sided) and supports no vegetation at, or within 200-feet of, the Chino Avenue overcrossing.

2.0 METHODS

In order to adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (GLA) assembled biological data consisting of three main components:

- Performance of a jurisdictional waters and wetlands evaluation;
- Performance of vegetation mapping for the Project site; and
- Performance of habitat assessments, and site-specific biological surveys, to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA.

A review of the Project site was made by Martin Rasnick (GLA senior regulatory specialist) on April 10, 2015 to evaluate the presence of potential jurisdictional waters and wetlands regulated by the Corps pursuant to Section 404 of the CWA, the CDFW pursuant to Section 1602 of the Fish and Game Code, and Regional Board pursuant to Section 401 of the CWA or Section 13260 of the California Water Code (CWC) [the Porter-Cologne Water Quality Control Act].

The focus of the biological surveys was determined through initial site review using aerial impacts, a review of the CNDDB [CDFW 2015a], CNPS 8th edition online inventory (CNPS 2054), NRCS soil data, other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project site were conducted on foot on April 10, 2015 in the proposed development areas for each target plant or animal species identified below. A focused survey for burrowing owl (*Athene cunicularia*) was performed on June 4 and 18 and July 1 and 18, 2014 for the CVRC properties and on June 18, 19, 23, and 24, 2015 for off-site improvement lands.

Due to highly disturbed site conditions there are no natural vegetation alliances or associations fitting or approaching criteria for membership rules in A Manual of California Vegetation, Second Edition or MCVII (Baldwin et al 2012), which is the California expression of the National Vegetation Classification. Vegetation present is relatively sparse overall and reflects ornamental plantings (e.g. nonnative trees) or spontaneous, herb-dominated species strongly adapted to anthropogenic disturbance. Vegetation present was mapped directly onto a 200-scale (1”=200’) aerial photograph and all species identified on site during vegetation mapping are included in the floral compendium prepared for the Specific Plan Area.

On February 13, 2015, Scott Cameron of Ecological Sciences, Inc. performed a habitat suitability evaluation for the potential of the Project site to support the federally listed Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). The evaluation included a field review of soils, vegetation, and existing disturbances as well as a review of the ecology of the species, current distribution of the species in relationship to the Project site, and potential value of the Project site for future recovery actions for the Delhi sands flower-loving fly. Appendix C provides the results of the habitat suitability evaluation performed by Ecological Sciences, Inc. (2015). Due to the inability of GLA to access property not controlled by CVRC, this habitat suitability was only performed on lands controlled by CVRC.

2.1 Summary of Surveys

GLA conducted biological studies in order to identify and analyze actual or potential impacts to biological resources associated with the Project site. Observations of plant and wildlife species were recorded during each of the above mentioned survey efforts [Appendix A: Floral Compendium and Appendix B: Faunal Compendium]. The studies conducted include the following:

- Potential jurisdictional waters and wetlands evaluation;
- Vegetation mapping; and
- Site-specific habitat assessments and biological surveys to evaluate the potential presence/absence of special-status species (or potentially suitable habitat) to the satisfaction of CEQA and federal and state regulations.

Table 2-1 provides a summary list of survey types, survey dates, and personnel.

Table 2-1. Summary of Biological Surveys for the Project Site.

Survey Type	Survey Dates	Biologists
Evaluation for Waters and Wetlands	4/10/2015	Martin Rasnick
General Survey, Vegetation Mapping, and Habitat Assessments	4/10/2015	Tricia Campbell
Focused Burrowing Owl Survey (CVRC Lands)	6/4, 18/2014, 7/1, 18/2014	Jeff Ahrens
Focused Burrowing Owl Survey (Off-site Improvement Lands)	6/18, 19, 23, 24/2015	David Smith
Delhi Sands Flower-loving Fly habitat evaluation	2/13/2015	Scott Cameron (Ecological Sciences, Inc.)

Individual plant and wildlife species are evaluated in this report based on their "special status." For the purpose of this report, plants are considered of "special status" based on one or more of the following criteria:

- Listed under the Federal and/or California Endangered Species Act (ESA, CESA); and/or
- California Rare Plant Rank of 1A, 1B, 2A, 2B, 3, or 4).

Wildlife species are considered of "special status" based on one or more of the following criteria:

- Listed under the Federal and/or California Endangered Species Act (ESA, CESA); and/or
- Designation as a state Species of Special Concern (SSC) or Fully Protected (SFP) species.

Vegetation communities and habitats are considered of "special status" based on their occurrence in the CNDDB inventory.

2.2 Botanical Resources

A site-specific assessment program was designed to accurately document the botanical resources within the Project site, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project site; (3) general field reconnaissance surveys; (4) vegetation; and (5) habitat assessments for all special-status plants initially considered for potential to occur. No focused survey for plants was determined to be needed.

2.2.1 Literature Search

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- CNPS *Inventory of Rare and Endangered Plants of California* (CNPS 2015); and

- CNDDB for the nine USGS 7.5' quadrangles centered on the Guasti, California, quadrangle area, thus including that of the Mount Baldy, Devore, Cucamonga Peak, Prado Dam, Riverside West, Fontana, Ontario, and Corona North, California quadrangle maps (CNDDB 2015).

2.2.2 Vegetation Mapping

Vegetation cover was mapped in the field directly onto a 200-scale (1"=200') aerial photograph. A vegetation map is included as [Exhibit 5 – Vegetation Map]. Representative site photographs are included as Exhibit 7.

2.2.3 Special-Status Plant Species and Habitats Evaluated for the Project Site

A literature search was conducted to obtain a list of special-status plants with the potential to occur within the Project site. The CNDDB (CDFW 2015a) was initially consulted for documented occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS Online Inventory (2015) and CDFW (2015b).

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project site were developed and incorporated into a mapping and survey program to achieve the following goals: (1) characterize the vegetation and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special-status plants that may occur within the Project site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site, if applicable.

2.2.4 Botanical Surveys

GLA biologist Tricia A. Campbell visited the Project site on April 10, 2015 and conducted vegetation mapping and habitat assessments for plants. The assessments were conducted by following meandering transects within target areas to support evaluation of all relevant, suitable habitat. All plant species encountered during the field surveys were identified and recorded. A complete list of the plant species observed is provided in [Appendix A - Floral Compendium]. Scientific taxonomy and nomenclature used in this report follow Baldwin et al (2012).

2.3 Wildlife Resources

Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of vertebrate wildlife species detected within the Project site is provided in Appendix B [Faunal Compendium]. Scientific nomenclature and common names for species referred to in this report follow Crother (2012) for amphibians and reptiles, the American Ornithologists' Union Checklist 7th Edition (1998 with supplements through 2014) for birds, and Wilson and Reeder (2005) for mammals. Methods for the general survey, habitat assessments, and/or focused survey for special-status animals, including any applicable survey protocols, are included below.

2.3.1 General Surveys

Birds
During the general and focused biological and reconnaissance surveys within the Project site, birds were identified incidentally. Birds were detected by both observation and vocalizations and species were recorded in field notes.

Mammals
During the general and focused biological and reconnaissance surveys within the Project site, mammals were identified incidentally. Mammals were detected by both observation and the presence of diagnostic sign (e.g. tracks, burrows, scat) and species were recorded in field notes.

Reptiles and Amphibians
During the general and focused biological and reconnaissance surveys within the Project site, a single species of reptile was identified incidentally. Reptiles were looked for by both observation and the presence of diagnostic sign (e.g. shed skins, scat, tracks, snake prints, and lizard tail drag marks) and species were recorded in field notes.

2.3.2 Special-Status Animal Species Evaluated for the Project Site

A literature search was conducted in order to develop a list of special-status wildlife species with potential to occur within the Project site. Species were evaluated based on factors including: (1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and (2) any other special-status animals that are known to occur within the vicinity of the Project site or for which potentially suitable habitat occurs on the Project site.

2.3.3 Habitat Assessment for Special-Status Animal Species

GLA biologist Tricia A. Campbell conducted habitat assessments for special-status animal species on April 10, 2015. An aerial photograph, soil map and/or topographic map were used to determine potential vegetation types and other physical features that may support special-status species within the Project site. Based on a preliminary review of the Project site, a focused survey for burrowing owl was prepared. Also, a focused habitat suitability evaluation was undertaken by a permitted biologist to determine if a Delhi sands flower-loving fly protocol survey should be completed.

Delhi Sands Flower-loving Fly. A focused habitat suitability evaluation of the Project site for Delhi sands flower-loving fly was performed on February 13, 2015 by Scott Cameron of Ecological Sciences, Inc. (2015), a biologist with expertise on Delhi sands flower-loving fly and permitted by USFWS to perform focused surveys for the species.

2.3.4 Focused Surveys for Special-Status Animals Species

As indicated in Section 2.3.3, the only species for which a focused survey was deemed necessary was the burrowing owl. The Project site supported several burrows that could be inhabited by burrowing owl, but as noted below, focused surveys were negative.

Burrowing Owl

GLA biologist Jeff Ahrens conducted a focused survey for the burrowing owl for all suitable habitat areas on properties controlled by CVRC in 2014. In 2015, GLA biologist David Smith performed a focused survey for burrowing owl for suitable habitat areas on off-site improvement lands. For the off-site improvement lands, legal access was not available in all areas. For lands not physically accessed, a visual survey was done using binoculars. Exhibit 6 illustrates the survey coverage for the burrowing owl focused survey. Survey visits were conducted in accordance with survey guidelines described in the 2012 CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012), excepting the recommended survey windows. Survey visits were performed between June 1 and July 19. Refer to Table 2-2 for dates and conditions.

As recommended by the survey guidelines, the survey visits were conducted between morning twilight (dawn) and 10:00 AM. Weather conditions during the surveys were conducive to a high level of bird activity.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Transects were spaced between 7 m and 20 m apart, adjusting for vegetation height and density, in order to provide adequate visual coverage of the survey areas. At the start of each transect, and at least every 100 m along transects, the survey area was scanned for burrowing owls using binoculars. All suitable burrows were inspected for diagnostic owl sign (e.g., pellets, prey remains, whitewash, feathers, bones, and/or decoration) in order to identify potentially occupied burrows. Exhibit 6 provides locations of suitable burrows mapped during the survey visits. There was an area on the Project site where several burrows were found, and because the burrows were very close to one another, they were mapped as a *burrow complex* (refer to Exhibit 6). Table 2-2 summarizes dates and conditions for the burrowing owl survey visits. The results of the burrowing owl surveys are documented in Section 4.0 of this report.

Table 2-2. Burrowing Owl Survey Visit Summary

Survey Date	Biologist	Start/End Time	Start/End Temperature (F.)	Start/End Wind Speed (mph)	Cloud Cover (%)
6/4/2014	Jeff Ahrens	0540 / 0920	61/78	0/1	0%/0%
6/18/2014	Jeff Ahrens	0610 / 1000	61/70	1/1	90%/100%
7/2/2014	Jeff Ahrens	0550 / 0910	64/70	4/4	50%/30%
7/18/2014	Jeff Ahrens	0600 / 0930	62/73	2/0	30%/40%
6/18/2015	David Smith	0600/0819	60/71	0/0	10%/0%
6/19/2015	David Smith	0508/0624	61/65	0/0	0%/0%
6/23/2015	David Smith	0501/0640	63/65	0/0	25%/10%
6/24/2015	David Smith	0503/0658	61/67	0/2	0%/0%

2.4 Jurisdictional Resources Evaluation

A review of the Project site as well as past historic aerial photography, was conducted by Martin Rasnick on April 10, 2015 to evaluate the presence of potential jurisdictional waters and wetlands regulated under the Corps pursuant to Section 404 of the CWA, the CDFW pursuant to Section 1602 of the Fish and Game Code, and the Regional Board pursuant to Section 401 of the CWA or Section 13260 of the CWC [the Porter-Cologne Water Quality Control Act].

3.0 REGULATORY SETTING

Development of the Project site is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state-and federally-listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

3.1 State and/or Federally Listed Plants or Animals

3.1.1 State of California Endangered Species Act

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease." The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

3.1.2 Federal Endangered Species Act

The FESA of 1973 defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and

animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

3.1.3 State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

3.2 California Environmental Quality Act

3.2.1 CEQA Guidelines Section 15380

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

3.2.2 Non-Listed Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA

Federally Designated Special-Status Species
All references to federally protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For this report the following acronyms are used for federal special-status species:

- FE Federally listed as Endangered
- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FC Federal Candidate Species

State-Designated Special-Status Species
Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC designates vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed taxa are not subject to specific, separate legal protections, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB only contains data regarding specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare
- SC State Candidate for listing
- SFP State Fully Protected
- SSC State Species of Special Concern

California Native Plant Society
The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* includes for each taxon a California Rare Plant Rank (CRPR), which is jointly determined by CNPS and CDFW. The CNPS Inventory focuses on geographic distribution and characterization of Rare, Threatened, or Endangered vascular plant species of California. The plant ranks, including extensions, are summarized in Table 3-1.

Table 3-1. CNPS Ranks 1, 2, 3, & 4 and Threat Code Extensions

CNPS Rank	Comments
Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.
Rank 4 – Plants of Limited Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	**Comments**
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

3.3 Jurisdictional Water Resources

3.3.1 Army Corps of Engineers

Pursuant to Section 404 of the CWA, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(2) All interstate waters including interstate wetlands;
(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:
(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or
(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
(4) All impoundments of waters otherwise defined as waters of the United States under the definition;
(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;
(6) The territorial seas;
(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.
(8) Waters of the United States do not include prior converted cropland.[2]

Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

[2] The term "prior converted cropland" is defined in the Corps' Regulatory Guidance Letter 90-7 (dated September 26, 1990) as "wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season…." [Emphasis added.]

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methods set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methods and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[3]);
- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

On January 9, 2001 and June 5, 2007 the Supreme Court of the United States issued two rulings *Solid Waste Agency of Northern Cook County* v. *United States Army Corps of Engineers, et al* [SWANCC] and *Rapanos* v. *United States* and *Carabell* v. *United States Army Corps of Engineers* [Rapanos], respectively). The first case reiterated that “isolated” waters (those with no interstate commerce connection) are not subject to federal jurisdiction under Section 404 of the Clean Water Act. The second case determined (in a plurality vote) that a water must have a nexus with a “traditionally navigable water” (an undefined term) to be subject to federal jurisdiction under Section 404 of the Clean Water Act. The Corps and EPA has continued to grapple with providing clear guidance on these two decisions and continue to propose and/or issue guidance.

On June 29, 2015, the EPA and the Corps issued the Clean Water Rule in the *Federal Register*, Volume 80, No. 124, which defines the scope of waters of the United States protected under the CWA. The rule becomes effective on August 28, 2015 and is a definitional rule intended to clarify the scope of “waters of the Unites States”. In this rule, waters of the Unites States would include the following categories of jurisdictional waters: (1) traditional navigable waters, (2) interstate waters, (3) territorial seas, (4) impoundments of jurisdictional waters, (5) tributary waters, (6) adjacent waters, and (7) regional features subject to a case-specific analysis to determine if a significant nexus exists, and (8) waters in the 100-year floodplain, or within 4,000 feet of a water of the United States, subject to a case-specific analysis, to determine if a significant nexus exists. Each of these features, as necessary, are described below.

[3] Lichvar, R. W. 2013. *The National Wetland Plant List:* 2013 wetland ratings. Phytoneuron 2013-49: 1-241.

Traditional Navigable Waters, Interstate Waters, Territorial Seas, Impoundments of Jurisdictional Waters: There is no change to the definitions of the first four types: traditional navigable waters, interstate waters, territorial seas, impoundments of jurisdictional waters.

Tributaries: The terms tributary and tributaries, as described in 33 CFR Part 328.3, each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (a)(4) of this section), to a water identified in paragraphs (a)(1) through (3) of this section that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (b) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a non-jurisdictional water to a water identified in paragraphs (a)(1) through (3) of this section.

Adjacent Waters: As described in 33 CFR, Part 328.3, the term adjacent means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (a)(1) through (5) of this section. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (a)(1) through (5) or are located at the head of a water identified in paragraphs (a)(1) through (5) of this section and are bordering, contiguous, or neighboring such water. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.

Adjacent is based on whether the feature neighbors a traditional navigable water. *Neighboring* is defined in 33 CFR Part 328.3 as:

(i) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

1.

(ii) All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain; and

(iii) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

Case-Specific Waters: The final rule creates *case-specific waters*, meaning they are not jurisdictional by rule but are subject to case-specific analysis to determine if a significant nexus exists and the water is a water of the United States. They are as follows:

- Prairie potholes
- Carolina and Delmarva bays
- Pocosins
- western vernal pools in California
- Texas coastal prairie wetlands.
- Waters within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas **and** waters within 4,000 feet of the high tide line or the ordinary high water mark of a traditional navigable water, interstate water, the territorial seas, impoundments, or covered tributary are subject to case-specific significant nexus determinations, unless the water is excluded under paragraph (b) of the rule.

Case-specific waters may be evaluated as ‘‘similarly situated,’’ but it must be first demonstrated that these waters function alike and are sufficiently close to function together in affecting downstream waters. The significant nexus analysis must then be conducted based on consideration of the functions provided by those waters in combination in the point of entry watershed.

The final rule keeps existing exclusions but now excludes by rule certain ditches from jurisdiction, including ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary, and ditches with intermittent flow that are not a relocated tributary, or excavated in a tributary, or drain wetlands. The final rule also excludes groundwater and erosional features as well as stormwater control features constructed to convey, treat, or store stormwater, and cooling ponds that are created in dry land.

SUMMARY
The agencies will assert jurisdiction over the following waters:

2. Traditional navigable waters
3. Interstate waters
4. Territorial seas
5. Impoundments of jurisdictional waters
6. Tributaries having bed and bank and ordinary high water mark
7. Adjacent waters neighboring traditional navigable waters, interstate waters, territorial seas, impoundments of jurisdictional waters, or tributaries with neighboring defined as follows: (1) Waters located in whole or in part within 100 feet of the ordinary high water

mark of 1 thru 5 above; (2) Waters located in whole or in part in the 100-year floodplain and that are within 1,500 feet of the ordinary high water mark of 1 thru 5 above (floodplain waters); or (3) Waters located in whole or in part within 1,500 feet of the high tide line of 1 or 2 and waters located within 1,500 feet of the ordinary high water mark of the Great Lakes.

The agencies will decide jurisdiction over the following waters based on a case-specific analysis to determine whether they have a significant nexus:

- Prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands; and
- Waters within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas and waters within 4,000 feet of the high tide line or the ordinary high water mark of a traditional navigable water, interstate water, the territorial seas, impoundments, or covered tributary are subject to case-specific significant nexus determinations, unless the water is excluded under paragraph (b) of the rule.

The agencies generally will **not** assert jurisdiction over the following features:

- Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary
- Ditches with intermittent flow that are not a relocated tributary, or excavated in a tributary, or drain wetlands.
- Groundwater and erosional features as well as stormwater control features constructed to convey, treat, or store stormwater, and cooling ponds that are created in dry land.
- Prior converted cropland and waste treatment systems.

- Erosional features, including gullies, rills, and ephemeral features that do not have a bed and banks and ordinary high water mark.

The agencies will apply the significant nexus standard as follows:

- A significant nexus is present when waters ‘‘either alone or in combination with similarly situated [wet]lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’ ’’

3.3.2 Regional Water Quality Control Board

Section 401 of the CWA requires any applicant for a Section 404 permit to obtain certification from the State that the discharge (and the operation of the facility being constructed) will comply with the applicable effluent limitation and water quality standards. In California this 401 certification is obtained from the Regional Water Quality Control Board. The Corps, by law, cannot issue a Section 404 permit until a 401 certification is issued or waived.

Subsequent to the SWANCC decision, the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of the SWANCC decision on the Section

401 Water Quality Certification Program.[4] The memorandum stating that for waters that are no longer considered subject to federal jurisdiction pursuant to Section 404 of the CWA, but which remain "waters of the state", the State will continue to regulate discharges under the Porter-Cologne Act. In such cases the applicant must apply for and obtain a Waste Discharge Requirement from the Regional Board.

3.3.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1616 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs."

CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and other wildlife. CDFW Legal Advisor has prepared the following opinion[5]:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...

- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFW] as natural waterways...

- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFW jurisdictional limits closely mirror those of the Corps. Exceptions are CDFW's addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

4.0 RESULTS

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and all needed focused surveys for special-status species, and a jurisdictional waters

[4] Wilson, Craig M. January 25, 2001. Memorandum addressed to State Board Members and Regional Board Executive Officers.

[5] California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.

and wetlands evaluation for Waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

4.1 Existing Conditions

The Specific Plan Area is composed of open lands used for dairy farming (including feeding and spreading grounds), crops, equestrian (corrals), trucking yard(s), abandoned farm lands, and Cucamonga Creek Flood Control Channel (along the east boundary). A few single-family rural residential homes occur along East Riverside Drive, South Ontario Avenue, and Chino Avenue. Soil surfaces reflect past and ongoing manipulation to support past and present agricultural uses. Manure is present throughout much of the Specific Plan Area. A dense layer of exotic grasses generally cover the pasturelands and manure spreading areas. Cattle feeding areas consist of mostly barren ground covered in manure. The Project site is similar to the Specific Plan Area, but without equestrian use and trucking yards.

Ground topography on the Project site is shallow and the slope is slight, with the southernmost portions of the Project site at about 750 feet and the northernmost portions at about 775 feet elevation. Soils are mapped as Delhi Fine Sand and Hilmar Loamy Fine Sand [Exhibit 4 - Soils] by the Natural Resource Conservation Service (NRCS). Fieldwork observations do not conflict with this mapping.

No natural or semi-natural vegetation communities are present and vegetation on the Project site included various non-native grasses and weedy species, such as Spanish brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), Mediterranean schismus (*Schismus barbatus*), barley (*Hordeum* sp.), filarees (*Erodium* spp.), Lamb's quarter's (*Chenopodium album*), pigweed (*Chenopodium* sp.), blessed milk thistle (*Silybum marianum*), prickly Russian-thistle (*Salsola tragus*), puncture vine (*Tribulus terrestris*), black mustard (*Brassica nigra*), cheeseweed (*Malva parviflora*), giant reed (*Arundo donax*), and dwarf nettle (*Urtica urens*). Overall non-native vegetative cover is about 95-100 percent in the pastureland/spreading areas. There are mature trees lining portions of South Ontario Avenue including gum tree (*Eucalyptu*s sp.), pine (*Pinus* sp.), Mexican fan palm (*Washingtonia robusta*), and Peruvian peppertree (*Schinus molle*); some have been trimmed to a height below existing power lines.

The Cucamonga Creek Flood Control Channel is a potential federal and state jurisdictional water resource that is fully concrete-lined and supports no vegetation at or within 200-feet of the Chino Avenue overcrossing.

There are no natural, surface drainage or ponding features (including vernal pools or swales) on site and there is no indication (e.g. deep-rooted perennial wetland vegetation) of a perched or seasonally high water table. There are agricultural waste water treatment detention basins along the west boundary of the Project site, within off-site improvement lands. These areas may receive wastewater only during a portion of the year. At the time of the field work, these basins ranged from being damp in portions to entirely dry. Vegetation, when present, was ruderal/weedy habitat.

The Project site lacks land features (e.g. a vegetated drainage) that would potentially support wildlife migration or large-scale nursery habitat, such as a heron rookery or salmon spawning grounds. Lands surrounding the Project site consist of active agriculture and high-density residential development. Cucamonga Creek Flood Control Channel, adjacent to the eastern boundary of the Specific Plan area, is not expected to support valuable, if any, animal movement. The entire channel is concrete and the channel walls are vertical at 90-degree angles to the channel and over 8 feet tall. Any animal within the channel would not be able to move out of the channel.

Wildlife detected on the Project site was limited to species highly adaptable to man-made landscapes. The most abundant group of species were birds, and of the birds present, the non-native Eurasian collared-dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), and European starling (*Sturnus vulgaris*) were most common. Other detected species were the common crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), and Botta's pocket gopher (*Thomomys bottae*). California ground squirrel (*Spermophilus beecheyi*) was detected on the Project site in small numbers. There are several mature non-native trees along South Ontario Avenue that could support raptor nesting.

Natural and semi-natural vegetation are absent. The vegetation mapping [Exhibit 5 – Vegetation map] mapped three land-use types potentially relevant to evaluation of natural resource values: Agricultural, Developed/Disturbed (includes bare ground), and ruderal (fallow weedy lands).

Table 4-1 summarizes the types of vegetation present on the Project site. The majority of the Project site is agriculture (active and inactive), followed by developed and ruderal [Exhibit 5 – Vegetation Map]. These lands were nearly devoid of native plant species. Those native plant species present are "ruderal/weedy" in habit, in that they commonly occur in highly disturbed conditions.

Table 4-1. Summary of Vegetation on the Project Site

Vegetation Type	Acreage
Agricultural	118.9
Developed/Disturbed	15.5
Ruderal	11.3
Total	**145.7**

Several residences (mapped as developed/disturbed) are present on the Project site, along with dirt and paved roads.

4.2 Special-Status Vegetation Communities

A search of the CNDDB (CDFW 2015a) revealed records for 10 special-status natural communities in the Guasti, California, USGS 7.5-minute quadrangle map area and eight surrounding quadrangle map areas: California Walnut Woodland, Riversidian Alluvial Fan Sage Scrub, Southern California Arroyo Chub / Santa Ana Sucker Stream, Canyon Live Oak Ravine Forest, Coastal and Valley Freshwater Marsh, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Riparian Forest, Southern Sycamore Alder

Riparian Woodland, and Southern Willow Scrub. Each of these was specifically determined to be absent from the Project site (and the entire Specific Plan area) based on this fieldwork. The Project site does not support any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Thus, no impact to these resources would occur from development of the Project site.

4.3 Special-Status Plants

No special-status plants were detected at the Project site. Table 4-2 provides a list of special-status plants evaluated for the Project site. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site.

Table 4-2. Special-Status Plants Evaluated for the Project Site

Species Name	Status	Habitat Requirements	Occurrence
Alpine sulphur-flowered buckwheat *Eriogonum umbellatum* var. *minus*	Federal: None State: None CNPS: 4.3	Gravelly soils in subalpine coniferous forest and upper montane coniferous forest.	Absent
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CNPS: 1B.1	Coastal dunes and coastal sage scrub.	Absent
California muhly *Muhlenbergia californica*	Federal: None State: None CNPS: 4.3	Mesic habitats, including seeps and streambanks, in chaparral, coastal scrub, lower montane coniferous forest, and meadows.	Absent
California saw-grass *Cladium californicum*	Federal: None State: None CNPS: 2B.2	Meadows and seeps, and alkaline or freshwater marshes and swamps.	Absent
Catalina mariposa-lily *Calochortus catalinae*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland.	Absent
Chaparral ragwort *Senecio aphanactis*	Federal: None State: None CNPS: 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Absent
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: 1B.1	Sandy soils in chaparral, coastal sage scrub.	Absent
Chickweed oxytheca *Sidotheca caryophylloides*	Federal: None State: None CNPS: 4.3	Sandy soils in lower montane coniferous forest.	Absent
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Absent

Species Name	Status	Habitat Requirements	Occurrence
Coulter's matilija poppy *Romneya coulteri*	Federal: None State: None CNPS: 4.2	Often in burns in chaparral and coastal scrub.	Absent
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CNPS: 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Absent
Crested milk-vetch *Astragalus bicristatus*	Federal: None State: None CNPS: 4.3	Sandy or rocky soils (mostly carbonate) in lower and upper montane coniferous forests.	Absent
Duran's rush *Juncus duranii*	Federal: None State: None CNPS: 4.3	Mesic soils in lower and upper montane coniferous forests, meadows and seeps.	Absent
Fragrant pitcher sage *Lepechinia fragrans*	Federal: None State: None CNPS: 4.2	Chaparral.	Absent
Greata's aster *Symphyotrichum greatae*	Federal: None State: None CNPS: 1B.3	Mesic soils in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland.	Absent
Hall's monardella *Monardella macrantha* ssp. *hallii*	Federal: None State: None CNPS: 1B.3	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Absent
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: 1B.2	Perennial bulb found in rocky, calcareous soils in chaparral, coastal scrub, and valley and foothill grassland.	Absent
Johnston's bedstraw *Galium johnstonii*	Federal: None State: None CNPS: 4.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland.	Absent
Johnston's buckwheat *Eriogonum microthecum* var. *johnstonii*	Federal: None State: None CNPS: 1B.3	Rocky soils in subalpine coniferous forest and upper montane coniferous forest.	Absent
Jokerst's monardella *Monardella australis* ssp. *jokerstii*	Federal: None State: None CNPS: 1B.1	Steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes. Chaparral, lower montane coniferous forest.	Absent
Laguna Moutains jewelflower *Streptanthus bernardinus*	Federal: None State: None CNPS: 4.3	Chaparral and lower montane coniferous forest.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Lemon lily *Lilium parryi*	Federal: None State: None CNPS: 1B.2	Mesic soils in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest.	Absent
Lewis' evening-primrose *Camissoniopsis lewisii*	Federal: None State: None CNPS: 3	Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland.	Absent
Lucky morning-glory *Calystegia felix*	Federal: None State: None CNPS: 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Absent
Marsh sandwort *Arenaria paludicola*	Federal: FE State: SE CNPS: 1B.1	Bogs and fens, freshwater marshes and swamps.	Absent
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Absent
Mesa horkelia *Horkelia cuneata* var. *puberula*	Federal: None State: None CNPS: 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Absent
Mojave phacelia *Phacelia mohavensis*	Federal: None State: None CNPS: 4.3	Sandy or gravelly soils in cismontane woodland, lower montane coniferous forests, meadows and seeps, pinyon and juniper woodland.	Absent
Nevin's barberry *Berberis nevinii*	Federal: FE State: SE CNPS: 1B.1	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Absent
Northern limestone buckwheat *Eriogonum microthecum* var. *alpinum*	Federal: None State: None CNPS: 4.3	Sometimes rocky or gravelly soils in alpine dwarf scrub and Great Basin scrub.	Absent
Ocellated Humboldt lily *Lilium humboldtii* ssp. *ocellatum*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland. Occurring in openings.	Absent
Paniculate tarplant *Deinandra paniculata*	Federal: None State: None CNPS: 4.2	Usually in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, and vernal pools.	Absent
Parish's desert-thorn *Lycium parishii*	Federal: None State: None CNPS: 2B.3	Coastal sage scrub, Sonoran desert scrub	Absent

Species Name	Status	Habitat Requirements	Occurrence
Parish's oxytheca *Acanthoscyphus parishii* var. *parishii*	Federal: None State: None CNPS: 4.2	Sandy or gravelly soils in chaparral and lower montane coniferous forest.	Absent
Parry's spineflower *Chorizanthe parryi* var. *parryi*	Federal: None State: None CNPS: 1B.1	Annual herb found in sandy or rocky openings in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	Absent
Peirson's spring beauty *Claytonia lanceolata* var. *peirsonii*	Federal: None State: None CNPS: 3.1	In scree within subalpine and upper montane coniferous forest.	Absent
Peninsular spineflower *Chorizanthe leptotheca*	Federal: None State: None CNPS: 4.2	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Absent
Pine fritillary *Fritillaria pinetorum*	Federal: None State: None CNPS: 4.3	Granitic or metamorphic soils in chaparral, lower and upper montane coniferous forests, pinyon and juniper woodland, and subalpine coniferous forest.	Absent
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Absent
Prairie wedge grass *Sphenopholis obtusata*	Federal: None State: None CNPS: 2B.2	Mesic soils in cismontane woodland, meadows and seeps.	Absent
Pringle's monardella *Mondardella pringlei*	Federal: None State: None CNPS: 1A	Sandy soils in coastal sage scrub.	Absent
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CNPS: 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Absent
Rigid fringepod *Thysanocarpus rigidus*	Federal: None State: None CNPS: 1B.2	Dry rocky slopes in pinyon and juniper woodland.	Absent
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: 4.3	Chaparral, coastal sage scrub.	Absent
Rock Creek broomrape *Orobanche valida* ssp. *valida*	Federal: None State: None CNPS: 1B.2	Granitic soils in chaparral, pinyon and juniper woodland.	Absent
Rock monardella *Monardella saxicola*	Federal: None State: None CNPS: 4.2	Rocky, usually serpentinite soils in closed-cone coniferous forest, chaparral, and lower montane coniferous forest.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Federal: FE State: SE CNPS: 1B.2	Coastal dune, coastal salt marshes and swamps.	Absent
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Absent
San Antonio Canyon bedstraw *Galium angustifolium* ssp. *gabrielense*	Federal: None State: None CNPS: 4.3	Granitic, sandy, or rocky soils in chaparral and lower montane coniferous forests.	Absent
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Absent
San Diego ambrosia *Ambrosia pumila*	Federal: FE State: None CNPS: 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Absent
Sanford's arrowhead *Sagittaria sanfordii*	Federal: None State: None CNPS: 1B.2	Marshes and swamps (shallow freshwater).	Absent
San Gabriel linanthus *Linanthus concinnus*	Federal: None State: None CNPS: 1B.2	Rocky soils and openings in chaparral, lower and upper montane coniferous forests.	Absent
San Gabriel manzanita *Arctostaphylos glandulosa* ssp. *gabrielensis*	Federal: None State: None CNPS: 1B.2	Chaparral (rocky).	Absent
San Gabriel oak *Quercus durata* var. *gabrielensis*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland.	Absent
San Gabriel ragwort *Senecio astephanus*	Federal: None State: None CNPS: 4.3	Rocky slopes, coastal bluff scrub, chaparral.	Absent
Santa Ana River woolly star *Eriastrum densifolium* ssp. *sanctorum*	Federal: FE State: SE CNPS: 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Absent
Short-joint beavertail *Opuntia basilaris* var. *brachyclada*	Federal: None State: None CNPS: 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Absent
Singlewhorl burrobrush *Ambrosia monogyra*	Federal: None State: None CNPS: 2B.2	Sandy soils in chaparral and Sonoran desert scrub.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: 1B.1	Sandy soils in alluvial scrub, chaparral, and cismontane woodland.	Absent
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	Federal: None State: None CNPS: 1B.2	Chaparral and coastal sage scrub.	Absent
Small-flowered morning-glory *Convolvulus simulans*	Federal: None State: None CNPS: 4.2	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Absent
Smooth tarplant *Centromadia pungens* ssp. *laevis*	Federal: None State: None CNPS: 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Absent
Southern California black walnut *Juglans californica*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Absent
Southern Sierra woolly sunflower *Eriophyllum lanatum* var. *obovatum*	Federal: None State: None CNPS: 4.3	Sandy loam in lower and upper montane coniferous forest.	Absent
Urn-flowered alumroot *Heuchera caespitosa*	Federal: None State: None CNPS: 4.3	Rocky soils in cismontane woodland, riparian forest (montane), lower and upper montane coniferous forest.	Absent
Vanishing wild buckwheat *Eriogonum evanidum*	Federal: None State: None CNPS: 1B.1	Annual herb found in sandy and/or gravelly soils within chaparral, cismontane woodland, lower montane coniferous forest, and pinyon and juniper woodland at an elevation range of 3600 ad 7200 feet.	Absent
Watson's amaranth *Amaranthus watsonii*	Federal: None State: None CNPS: 4.3	Mojavean desert scrub, Sonoran desert scrub.	Absent
Western spleenwort *Asplenium vespertinum*	Federal: None State: None CNPS: 4.2	Rocky soils in chaparral, cismontane woodland, and coastal scrub.	Absent
White-bracted spineflower *Chorizanthe xanti* var. *leucotheca*	Federal: None State: None CNPS: 1B.2	Sandy or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland.	Absent
White rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CNPS: 2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Woolly mountain-parsley *Oreonana vestita*	Federal: None State: None CNPS: 1B.3	Gravel or talus in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest.	Absent

STATUS

Federal
FE – Federally Endangered

State
SE – State Endangered

CNPS
Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 – Plants about which more information is needed (a review list).
Rank 4 – Plants of limited distribution (a watch list).

Threat Code extension
.1 – Seriously endangered in California (over 80% occurrences threatened)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Occurrence
Absent – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.

4.3.1 Special-Status Plants Detected at the Project Site

No special-status plants were detected at the Project site and none are expected to be present.

4.4 Special-Status Animals

No special-status animals were detected at the Project site. Table 4-3 provides a list of special-status animals evaluated for the Project site through general biological surveys, habitat assessments, and focused studies. Species were evaluated based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

Table 4-3. Special-Status Animals Evaluated for the Project Site

Species Name	Status	Habitat Requirements	Occurrence
Invertebrates			
Delhi-sands flower-loving fly *Raphiomidas terminatus abdominalis*	Federal: FE State: None	Fine, sandy soils, often associated with wholly or partially consolidated dunes referred to as the "Delhi" series.	Focused habitat evaluation was performed and no

		Vegetation consists of a sparse cover, including California buckwheat, California croton, deerweed, and evening primrose.	potential for the species to be present on the Project site.
Fish			
Arroyo chub *Gila orcutti*	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	None
Santa Ana speckled dace *Rhinichthys osculus ssp. 3*	Federal: None State: SSC	Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. Usually inhabits shallow cobble and gravel riffles.	None
Santa Ana sucker *Catostomus santaanae*	Federal: None State: SSC	Small, shallow streams, with currents ranging from swift in the canyons to sluggish in the bottom lands.	None
Amphibians			
Arroyo toad *Anaxyrus californicus*	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats.	None
California red-legged frog *Rana draytonii*	Federal: FT State: SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.	None
Coast range newt *Taricha torosa*	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	None
Northern leopard frog *Lithobates pipiens*	Federal: None State: SSC	Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, reservoirs.	None
Southern mountain yellow-legged frog *Rana muscosa*	Federal: FE State: SE, SSC	Streams and small pools in ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.	None
Western spadefoot *Spea hammondii*	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	None
Reptiles			
California mountain kingsnake (San Bernardino population) *Lampropeltis zonata (parvirubra)*	Federal: None State: SSC	Bigcone spruce and chaparral at lower elevations. Black oak, incense cedar, Jeffery pine, and ponderosa pine at higher elevations.	None
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	None

Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	None
Orange throat whiptail *Aspidoscelis hyperythra*	Federal: None State: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	None
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	None
Silvery legless lizard *Anniella pulchra pulchra*	Federal: None State: SSC	Occurs primarily in areas with sandy or loose organic soil, or where there is plenty of leaf litter. Associated with coastal sage scrub, chaparral, coastal dunes, valley/foothill grasslands, oak woodlands, and pine forests.	None
South coast garter snake *Thamnophis sirtalis ssp.*	Federal: None State: SSC	Utilizes a wide variety of habitats- forests, mixed woodlands, grassland, chaparral, farmlands, often near ponds, marshes, or streams.	None
Two-striped garter snake *Thamnophis hammondii*	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	None
Western pond turtle *Emys marmorata*	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons.	None. There are no water features on the Project site. Cucamonga Creek Flood Control Channel is concreted-lined and devoid of vegetation.
Birds			
American peregrine falcon (nesting) *Falco peregrinus anatum*	Federal: Delisted State: Delisted, SFP	Although part of its historic breeding range, this species does not breed in southern California. In the west, breeding habitat consists of high cliffs along the coast.	None
Bald eagle (nesting & wintering) *Haliaeetus leucocephalus*	Federal: BGEPA State: SE, SFP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	None
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	Federal: None State: SE	Coastal salt marshes.	None
Black swift (nesting) *Cypseloides niger*	Federal: None State: SSC	Nests in forested areas near rivers in dark, damp areas. Forages in skies over mountainous areas and on coastal cliffs.	None

Burrowing owl *Athene cunicularia*	Federal: None State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Confirmed absent on the Project site.
California black rail *Laterallus jamaicensis coturniculus*	Federal: None State: ST, SFP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	None
California spotted owl *Strix occidentalis occidentalis*	Federal: None State: SSC	Prefers mature forests. Can utilize rocky canyons.	None
Clark's marsh wren *Cistothorus palustris clarkae*	Federal: None State: SSC	Freshwater and brackish marshes dominated by bulrushes or cattails.	None
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	Federal: None State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	None
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	None
Golden eagle (nesting & wintering) *Aquila chrysaetos*	Federal: BGEPA State: SFP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	None
Grasshopper sparrow (nesting) *Ammodramus savannarum*	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	None
Least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	None
Lesser sandhill crane (wintering) *Grus canadensis canadensis*	Federal: None State: SSC	Pastures, moist grassland, alfalfa fields, and shallow wetlands. Roosts in wetland habitats, including rain-pooled agricultural fields, shallow freshwater lakes and ponds, alkaline lakes, and channels of shallow rivers.	None
Loggerhead shrike (nesting) *Lanius ludovicianus*	Federal: None State: SSC	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	None observed. Potential to occur as migrant and winter visitor (foraging role). No potential for nesting.

Long-eared owl (nesting) *Asio otus*	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	None
Mountain plover (wintering) *Charadrius montanus*	Federal: None State: SSC	Does not nest in California. Occurs within the state only during the wintering season. Largest numbers winter among grasslands and agricultural areas within the interior areas of the state.	None
Northern harrier (nesting) *Circus cyaneus*	Federal: None State: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	None
Olive-sided flycatcher (nesting) *Contopus cooperi*	Federal: None State: SSC	Breeds in montane and northern coniferous forests, at forest edges and openings, such as meadows and ponds. Winters at forest edges and clearings where tall trees or snags are present.	None
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	None
Swainson's hawk (nesting) *Buteo swainsoni*	Federal: None State: ST	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	None
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: SE	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	None
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE	Dense, wide riparian woodlands with well-developed understories.	None
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: SFP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	None observed. Potential to occur in a foraging role. No potential for nesting.
Willow flycatcher (nesting) *Empidonaz traillii*	Federal: None State: SE	Breeds in moist, shrubby areas, often with standing or running water. Winters in shrubby clearings and early successional growth.	None
Yellow-breasted chat (nesting) *Icteria virens*	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	None
Yellow-headed blackbird (nesting)	Federal: None State: SSC	Breed and roost in freshwater wetlands with dense, emergent vegetation such as	None

Xanthocephalus xanthocephalus		cattails. Often forage in fields, typically wintering in large, open agricultural areas.	
Yellow rail *Coturnicops noveboracensis*	Federal: None State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	None
Yellow warbler (nesting) *Setophaga petechia*	Federal: None State: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	None
Mammals			
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: SSC	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavities.	None observed. Low potential for foraging above the Project site.
Desert bighorn sheep *Ovis canadensis nelsoni*	Federal: None State: SFP	Visually open foraging areas of grass near steep, rocky areas.	None
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	None
Mohave river vole *Microtus californicus mohavensis*	Federal: None State: SSC	Moist habitats including meadows, freshwater marshes and irrigated pastures in the vicinity of the Mojave River.	None
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	None
Pacific pocket mouse *Perognathus longimembris pacificus*	Federal: FE State: SSC	Fine, alluvial soils along the coastal plain. Scarcely in rocky soils of scrub habitats.	None
Pallid bat *Antrozous pallidus*	Federal: None State: SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	None
Pallid San Diego pocket mouse *Chaetodipus fallax pallidus*	Federal: None State: SSC	In desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodland. Sandy herbaceous areas, usually in association with rocks or coarse gravel.	None
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	None

San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: SSC	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	None
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats including low density sage scrub.	None. No native vegetation present on or adjacent to the site.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	None
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	None
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	None observed. Low potential for foraging above the Project site.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	None observed. Low potential to occur – roost in fan palms and forage above the site at night.

Status

Federal
FE – Federally Endangered
FT – Federally Threatened
BGEPA – Bald and Golden Eagle Protection Act

State
SE – State Endangered
ST – State Threatened
SFP – California Fully-Protected Species
SSC – Species of Special Concern

4.4.1 Special-Status Wildlife Species not Observed but with a Potential to Occur at the Project Site

Delhi Sands Flower-loving Fly (DSFF). Absent. The Project site has the soils characteristically associated with DSFF and occurs within the historical range of the species. Ecological Sciences, Inc. was contracted to perform a detailed habitat suitability evaluation as to the potential of DSFF to occur on the portion of the Project site controlled by CVRC. The field analysis was performed in February 2015. The complete report is found in Appendix C, and summarized here.

Based on results of the February 2015 habitat suitability evaluation, existing conditions present

at the site are not consistent with those known or expected to support DSFF. No exposed natural or semi-natural open areas with unconsolidated wind-worked granitic soils or dunes are present. Exposure to extensive substrate disturbances (e.g. abandoned dairy) has substantial negative effects on potential DSFF habitat and prevents potentially suitable DSFF microhabitat conditions from developing. Substrate conditions are not consistent with those most often correlated with potential DSFF habitat and no DSFF plant associations are present on site.

Under current conditions, the site would generally be considered prohibitive to DSSF occupation. The underlying soil environment appears to be the most definitive factor of whether an area could potentially support DSFF. Accordingly, the quality of Delhi soils present within the study area was rated for its potential to support DSFF. The area mapped as Delhi soils was visually inspected and rated based on a scale of 1 to 5, with 5 being the best quality and most suitable habitat in the biologist's judgment:

1. Soils dominated by heavy deposits of alluvial material including coarse sands and gravels with little or no Delhi sands and evidence of soil compaction. *Unsuitable.*

2. Delhi sands are present but the soil characteristics include a predominance of alluvial materials (Tujunga Soils). *Very Low Quality.*

3. Although not clean, sufficient Delhi sands are present to prevent soil compaction. Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality*.

4. Abundant clean Delhi sands with little or no alluvial material or Tujunga soils present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. *Moderate Quality*

5. Sand dune habitat with clean Delhi sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. *High Quality*

Based on the above ratings and existing site conditions, the CVRC-controlled lands would be considered *Unsuitable* for DSFF. In view of the site's highly degraded and isolated condition, exposure to significant surface disturbances, and analyses of correlative habitat information from a wide range (e.g., relatively disturbed to more natural habitats) of occupied DSFF habitats in the region, the lands do not contain habitat suitable to support or sustain a viable DSFF population.

Although analysis of off-site improvement lands was not able to be performed at the same level, GLA performed a visual analysis on these lands and reviewed soils records. The off-site improvement lands have the same types and level of disturbances as do the CVRC-controlled lands. Consequently, the off-site improvement lands are considered unsuitable for DSFF.

Burrowing Owl. Absent. Potential habitat for this species was judged present by GLA. Biologists from GLA performed a focused survey on the Project site and the species was determined absent [Exhibit 6 – Burrowing Owl Results Map]. No sign or detection of burrowing owl was made. The species is confirmed absent.

White-tailed Kite. Potential to occur, although none was observed. This species hunts in open lands vegetated with grasses and low-growing shrubs. Although the Project site has mature trees, this species has no potential to nest, as it requires low trees and/or large shrubs with little disturbance. This species has potential to occur during the fall and spring months as a migrant and may forage on the site over winter.

Loggerhead Shrike. Potential to occur, although none was observed. This is a formerly common resident and occasional migrant in open natural areas throughout cismontane (coastal rather than desert) southern California. For breeding, requires areas with high productivity of large invertebrate and small vertebrate prey, along with low levels of predation for adults and young (e.g., from crows, ravens, hawks, and domestic pets). The resident populations have slowly declined for decades and appear to be on the verge of extirpation, though small numbers still breed in relatively pristine, undisturbed grasslands and savannahs. Populations occurring in the region from the north, as migrants and winter visitors, have also declined substantially but at this point are somewhat more numerous than the resident birds. Thus, migrant or winter visitors may visit the Project site on rare occasions, as it is relatively open.

Western Mastiff Bat & Big Free-tailed Bat. Potential to occur, although none was observed. Forages over a wide variety of natural communities and occasionally over manmade areas. The Project site is potentially suitable for foraging, given the broad array of conditions utilized by the species, but does not show potential to be especially valuable or productive for the species. The species nests and roosts in crevices in tall, generally vertical surfaces and requires very low levels of disturbance (e.g. noise, night lighting, human or other activity) in the site vicinity. Evidence indicates low but possible potential for occasional foraging, but no reasonable potential for roosting or nesting, by the species at the Project site.

Western Yellow Bat. Potential to occur, although none was observed. This is primarily a desert species, historically foraging, roosting and nesting in desert wetlands, especially native fan palm oases. It has substantially declined in this role due to disturbance and degradation of desert wetlands. However, it has also apparently expanded its range into other areas in recent decades, apparently as an adaptation to increasing ornamental plantings in the southwest and southern California of nonnative fan palms. The species was unrecorded in cismontane (coastal rather than desert) California prior to about 1969, with noteworthy increases since then (Constantine 1998). The Project site supports a few fan palms and only marginal potential foraging habitat. Thus potential for occurrence of a few individuals is low but possible.

4.4.2 Critical Habitat

Federal designated or proposed Critical Habitat is absent from the Project site and adjacent lands.

4.5 Raptor Use

The Project site provides foraging habitat for regionally common species of raptors. A Cooper's hawk (*Accipiter cooperii*) was observed foraging on the Project site during the April 10, 2015 field work. Other common species, such as red-tailed hawk (*Buteo jamaicensis*) and American

kestrel (*Falco sparverius*), may forage on the Project site. There is potential for white-tailed kite, a state Species of Special Concern, to occur in a foraging role during migration or winter.

The Project site provides potential nesting habitat for common species of raptors. No nests were detected during the field work but there are mature trees having the necessary structure to support nesting. Refer to Exhibit 5, Vegetation Mapping for the location of potential raptor nesting habitat.

4.6 Native Nesting Birds

The Project site contains vegetation, open land, and structures that potentially provide suitable nesting sites for species legally protected as migratory birds. Specifically, direct impacts to native nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) [6] and California Fish and Game Code. Nesting by non-native bird species are not protected and the Project site is used regularly by several non-native species including European starling, rock dove, and Eurasian collared-dove.

No special-status species of birds are expected to nest on the Project site.

4.7 Soil Mapping

The NRCS identifies the following soil types (series) as occurring (currently or historically) within the Project site [Exhibit 4 – Soils Map]: Delhi Fine Sand and Hilmar Loamy Fine Sand. Existing soils on the Project site appeared to agree with the NRCS mapping; however lands showed signs of deep soil amendment through introduction of vegetable waste and cow manure.

4.8 Jurisdictional Water Resources

The Project site lacks water resources under the jurisdiction of the Corps, CDFW, and the Regional Board, except possibly at the Cucamonga Creek Flood Control Channel. The waste treatment detention basins along the west boundary of the Project site would not be subject to regulation by the Corps pursuant to Section 404 of the CWA as these features were constructed within, and drain, wholly upland areas and do not carry water from the Project site.

The CDFW would not regulate the waste treatment detention basins pursuant to Section 1602 of the Fish and Game Code as they are not streambeds, do not support a defined bed, bank, or channel, and the disturbance to these features would *not* result in: 1) the substantial diversion, obstruction, or alteration of the natural flow or bed, channel, or bank of a river, stream, or lake, 2) the use of material from a streambed, or 3) a substantial adverse effect upon existing fish or wildlife resources.

[6] The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

The Regional Board would not regulate the waste treatment detention basins pursuant to Section 401 of the CWA or Section 13260 of the CWC, the Porter-Cologne Water Quality Control Act, as these features were constructed within, and drain, wholly upland areas and do not carry water from the site, and are absent of beneficial uses regulated by the Regional Board under the Basin Plan.

The Cucamonga Creek Flood Control Channel may be regulated by the Corps, CDFW, and the Regional Board. The proposed improvement, the widening of Chino Avenue at the Cucamonga Creek Flood Control Channel, would not involve any temporary or permanent encroachment or placement of structure(s) into this Channel. All work would occur outside the Cucamonga Creek Flood Control Channel and the new Chino Avenue crossing would be a clear-span structure.

4.9 Wildlife Migration/Nurseries

Wildlife corridors provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired.

The Project site lacks land features (e.g. a drainage) that would potentially support wildlife migration or large-scale nursery habitat, such as a heron rookery or salmon spawning grounds. Lands surrounding the Project site consist of active agriculture and high-density residential development. The Cucamonga Creek Flood Control Channel, adjacent to the eastern boundary of the Specific Plan area, is not expected to support valuable, if any animal movement. The entire channel is concrete and the channel walls are vertical at 90-degree angles to the channel and over 8 feet tall. Any animal within the channel would not be able to move out of the channel.

5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to biological resources that would occur as a result of development of the Project site. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other off-site areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases

in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

5.1 California Environmental Quality Act (CEQA)

5.1.1 Thresholds of Significance

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."*

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

> *"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a*

fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species,..."

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

5.1.2 Criteria for Determining Significance Pursuant to CEQA

Appendix G of the 1998 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

a) 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 Game or U.S. Fish and Wildlife Service.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) 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.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5.2 Impacts to Native Vegetation

No native vegetation communities are present. No impact to native vegetation communities would occur.

5.3 Impacts to Special-Status Plants

No special-status plants are documented or have potential to occur on the Project site. No impacts to special-status plants would occur.

5.4 Impacts to Special-Status Animals

Several special-status species have potential to occur on the Project site. These species are: white-tailed kite, burrowing owl, loggerhead shrike, western mastiff bat, big free-tailed bat, and western yellow bat. Discussion is provided below for the potential impacts to these species that may occur from development of the Project site. There is no potential for any federal or state listed animals to occur on the Project site or to be impacted by the Project.

Raptors. Raptors (Birds of Prey) include owls, hawks, eagles, and falcons. Common species of raptors (e.g. red-tailed hawk, American kestrel, barn owl) as well as white-tailed kite (state Species of Special Concern) have the potential to forage on the Project site. Development of the Project site would remove an estimated 130.2 acres of potential foraging habitat (ruderal and agriculture). The Project site also supports potential nesting habitat in the form of mature trees [refer to Exhibit 5]. Development of the Project site would remove the potential raptor nesting habitat and the 130.2 acres of potential foraging habitat. The loss of 130.2 acres of potential foraging habitat would not pose a significant impact to raptors under CEQA because the Project site has been actively managed for crop and dairy agriculture for many years, affecting the prey base present. Raptors (depending on the species) eat small mammals, large insects, and reptiles. The Project site has been managed to dissuade occupation by small mammals and because of the high level of ongoing land disturbances, reptile populations are expected to be very low. Raptor species that forage on large insects include burrowing owl (confirmed absent) and American kestrel, a species very common to the region and well adapted to human landscapes.

Burrowing Owl. The Project site provides potential burrowing owl habitat. Surveys were performed in 2014 on the CVRC-controlled lands and in 2015 on the off-site improvement lands and the species was confirmed absent. However, implementation of the measures presented in Section 6.1 (burrowing owl), ensures no direct impacts to burrowing owl would occur, if the species were to become present prior to construction.

Loggerhead Shrike. The Project site has potential to provide foraging habitat for loggerhead shrike. This species has the potential to occur occasionally on the Project site during migration and winter months. The species is not expected to nest on the site due to the lack of potential nesting habitat.

Development of the Project site would remove 130.2 acres of potential foraging habitat (agriculture, ruderal) that may be occasionally used by loggerhead shrike. The Project site does not provide valuable habitat for the species and the number of individuals potentially affected is expected to be few. The removal of potential foraging habitat for this species through development of the Project site would not be a significant impact under CEQA.

Special-status Bats. Three species of bats, western mastiff bat, big free-tailed bat, and western yellow bat have potential to occur on the Project site. These species are state Species of Special Concern and they have a low potential to occur in a foraging role (above the Project site). These species forage on insects while in flight. Development of the Project site may reduce available foraging habitat for these three bat species, although the quality of the potential habitat does not appear to be of much value given the limited number of flying insects detected during site visits. The number of individuals potentially affected is judged to be few given the degraded nature of the potential habitat on the Project site. Ornamental fan palms on the Project site could be used by western yellow bats for roosting, although none was observed. This species is classified as a solitary bat, in that it does not form large roosts, but instead roosts singly or with a few other individuals. Although this species has been given special status, its population has increased in Southern California due to the increase in plantings of ornamental fan palms. Potential impacts to these three species of bats would be less than significant under CEQA given the limited number of individuals, if any, which may be potentially impacted.

5.5 Impacts to Critical Habitat

The proposed Project will not impact lands federally designated as Critical Habitat because none are mapped on, or adjacent to, the Project site. *No impact.*

5.6 Impacts to Native Nesting Birds

Development of the Project site has the potential to impact active native bird nests if vegetation is removed during the nesting season (January 1 to August 31). Impacts to nesting native birds are prohibited by the MBTA and California Fish and Game Code. A project-specific mitigation measure is identified in Section 6.2 of this report to avoid impacts to native nesting birds. Based in part upon the prohibition of removal of active bird nests and due to the limited habitat value of the Project site for such birds, impacts to native birds by the proposed Project would not be a significant impact under CEQA. The native birds with potential to nest on the Project site would be those that are extremely common to the region and highly adapted to human landscapes, such as Anna's hummingbird and the house finch. The number of individuals potentially affected by development of the Project site would not significantly affect regional or local, populations of such species.

5.7 Wildlife Migration/Nurseries

Development of the Project site would not interfere or impact the movement of native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The Project site lacks migratory wildlife corridors and wildlife nursery sites. *No impact*.

5.8 Impacts to Jurisdictional Water Resources

Development of the Project site will not impact waters or wetlands subject to the jurisdiction of the Corps, CDFW, and/or Regional Board. None of these resources are present on the Project site, with the exception of Cucamonga Creek Flood Control Channel. Development of the

Project site would not encroach into this feature, temporarily or permanently. The widening of Chino Avenue will occur using a clear span structure with no footings or structural supports proposed in the channel, either temporarily or permanently. Development of the Project site will not impact federally protected wetlands as defined by Section 404 of the CWA (including but limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means. *No impact.*

5.9 Indirect Impacts

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Potential indirect effects associated with development include water quality impacts from associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities.

The Project site lacks natural lands and is adjacent to active agriculture, high density residential development, and rural residential development. The biological resources on-site are degraded and heavily dominated by non-native species, as are the biological resources adjacent to the site. The potential for development of the Project site to indirectly impact biological resources to a significant degree is none. Potential indirect effects to biological resources would be less than significant.

5.10 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, may or may not be deemed a substantial impact, but when considered in addition to (considerable contribution to) the impacts of related projects in the area, would be considered potentially significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project. For biological resources potentially present and impacted by development of the Project site (raptor habitat, loggerhead shrike habitat, and bat habitat), the degree of contribution to the regional decline of these resources is judged to not be considerable at the project and regional levels.

6.0 MITIGATION/AVOIDANCE MEASURES

The following discussion provides project-specific mitigation/avoidance measures for potential impacts to special-status resources.

6.1 Burrowing Owl

This section provides the necessary avoidance measures for the Project site.

As recommended by CDFW, a preconstruction presence/absence survey for burrowing owls within 14 days prior to each phase of development (including clearing and grubbing) will be necessary to ensure no mortality to the species occurs (CDFW 2012). Each pre-construction survey will need to include the lands proposed for development within the phase and its associated off-site improvements. If burrowing owls are detected, a mitigation and eviction plan for that phase will be drafted and provided to the CDFW for approval. Eviction can occur only when the owls are not nesting.

No further action is required.

6.2 Native Nesting Birds

As presented in Section 5.6, development of the Project site does not pose a biologically significant impact to native nesting birds under CEQA. This is because the species of native birds with potential to nest on the Project site are very common to abundant to the region (e.g. house finch, killdeer) and the number of individuals possibly impacted would not substantially reduce existing populations. The MBTA and the Fish and Game Code do not make a distinction based upon the stability and/or abundance of populations, but instead prohibit the "take" of any native bird. As such, the following is a recommendation for complying with the MBTA and the Fish and Game Code. Vegetation clearing of each phase will be conducted outside of the nesting season (January 1 through August 31). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within three days prior to any disturbance of the Project site phase, including disking, demolition activities, and grading. If active nests of native species are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Typically established buffers are greater for raptors than songbirds and depend upon the species, the nesting stage, and type of construction activity proposed. The buffer should be 300 feet for raptors and 150 feet for songbirds; unless specifically determined by a qualified biologist familiar with the nesting phenology of the nesting species.

There are no specific protocols for nesting bird surveys or for buffering requirements once nests are found. The key is to ensure that no direct mortality of a native bird, which when nesting includes eggs and young. Implementation of this measure will ensure the Project site applicant is not in violation of the MBTA and Fish and Game Code.

6.3 Level of Significance after Mitigation

With the implementation of the mitigation measures impacts to burrowing owl (if present) would be reduced to less than significant under CEQA. Because impacts from the development of the Project site would be mitigated to less than significant, the Project's cumulative impacts similarly would not be significant and thus would not be cumulatively considerable.

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8.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed: Brian A. Campbell Date: August 19, 2015

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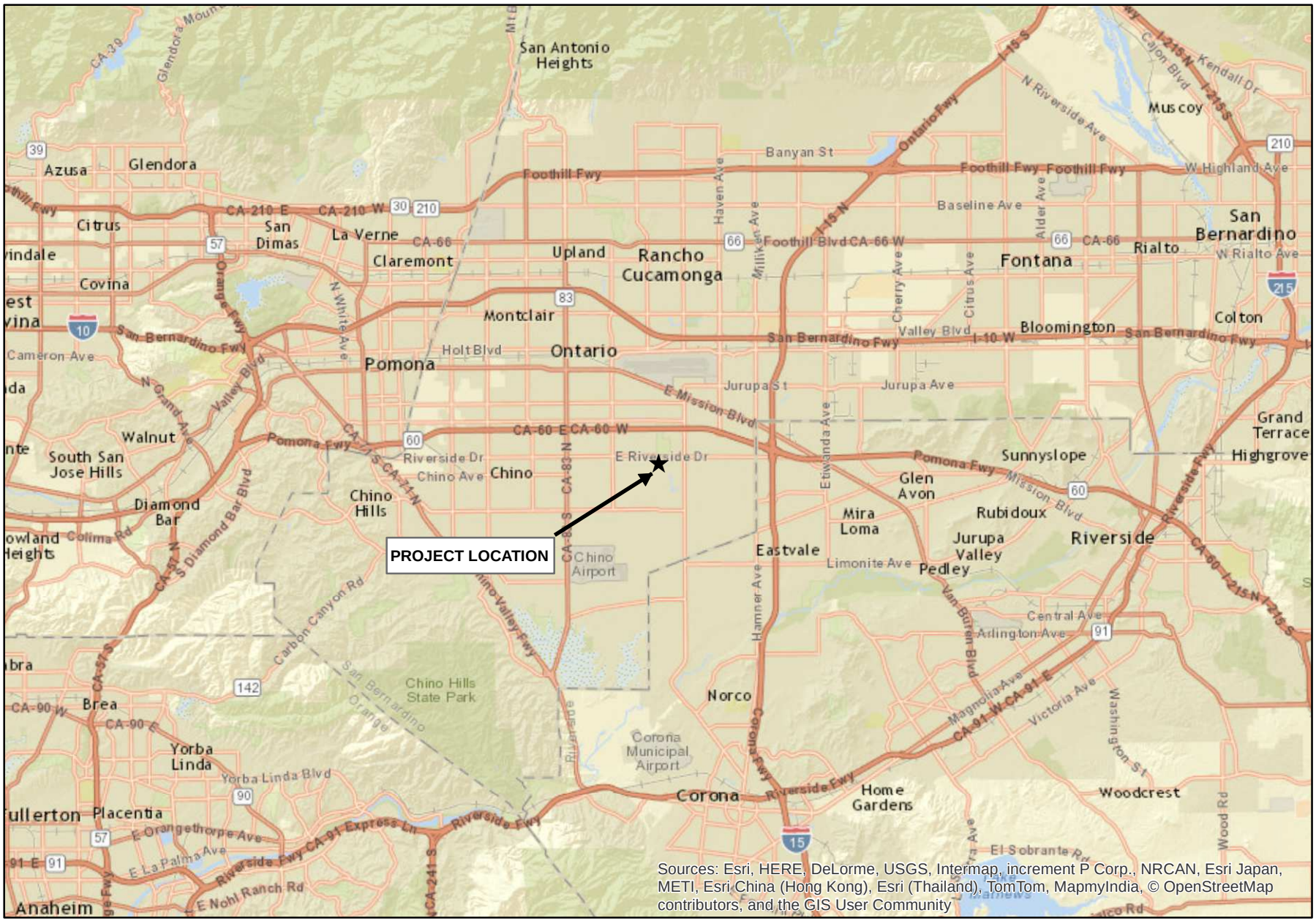
EXHIBITS



Source: ESRI World Street Map

N

0 2 4 8 Miles

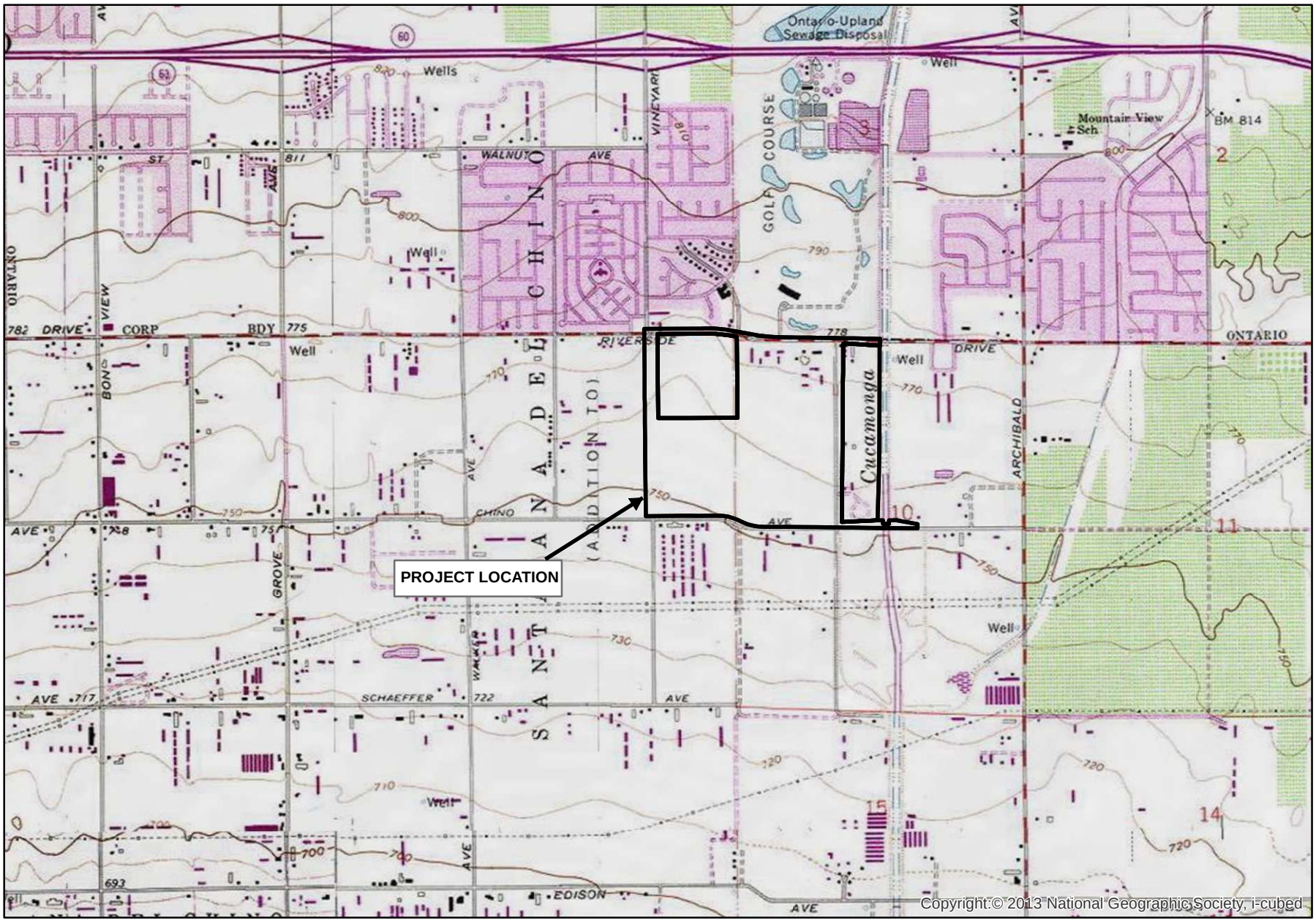
ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Adapted from USGS Guasti, CA quadrangle



N

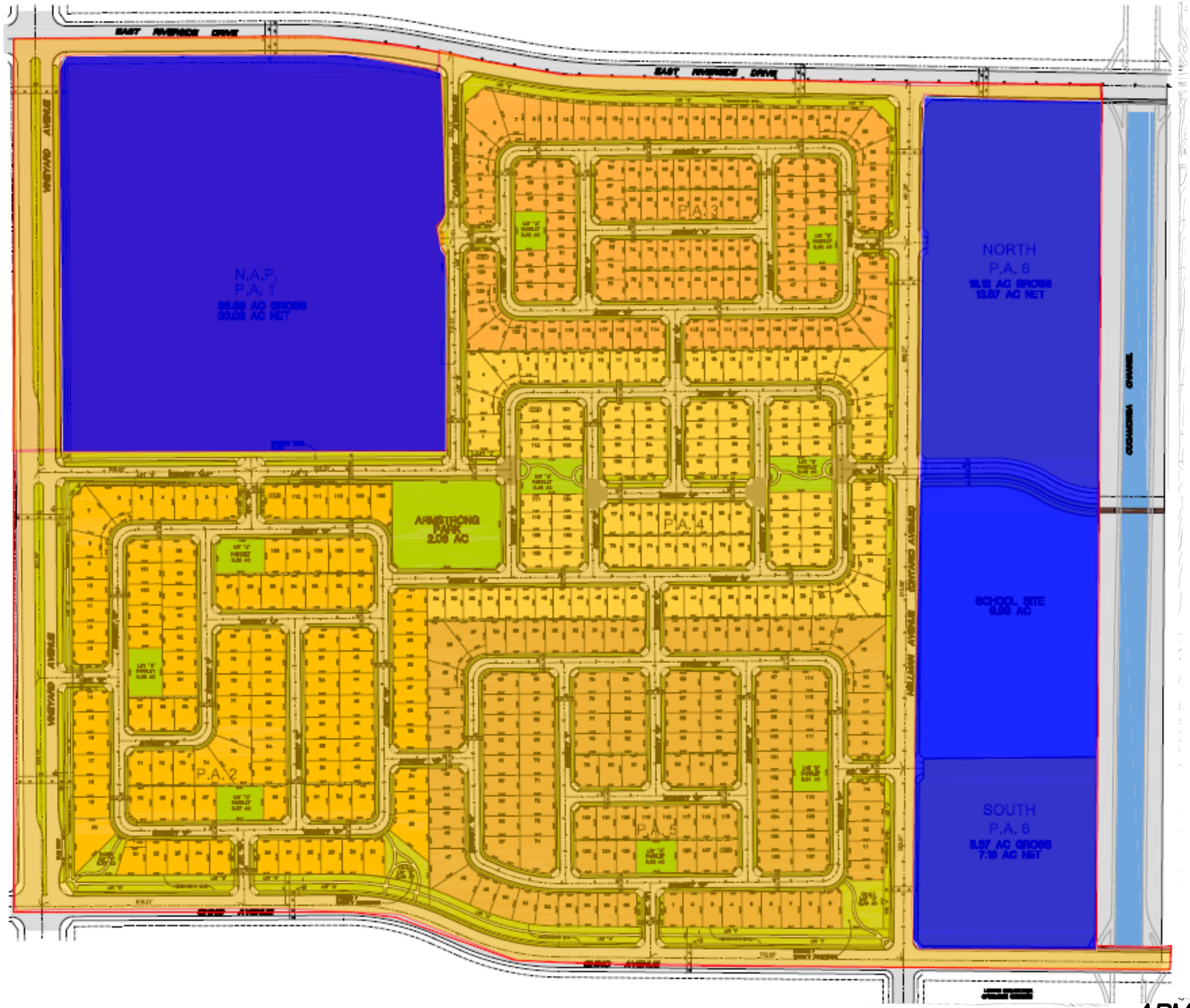
0 1,000 2,000 4,000 Feet

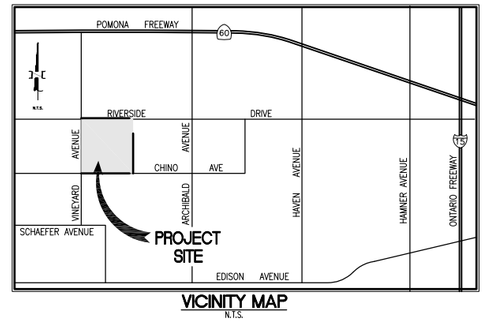
ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2





VICINITY MAP
N.T.S.

LEGEND

CVRC Project Site
T.C.E.

Specific Plan Boundary (Including Offsite Improvements)

Non-CVRC Project Site

NORTH

0 140 280 560

ARMSTRONG RANCH SPECIFIC PLAN PROJECT
Project Site

GLENN LUKOS ASSOCIATES

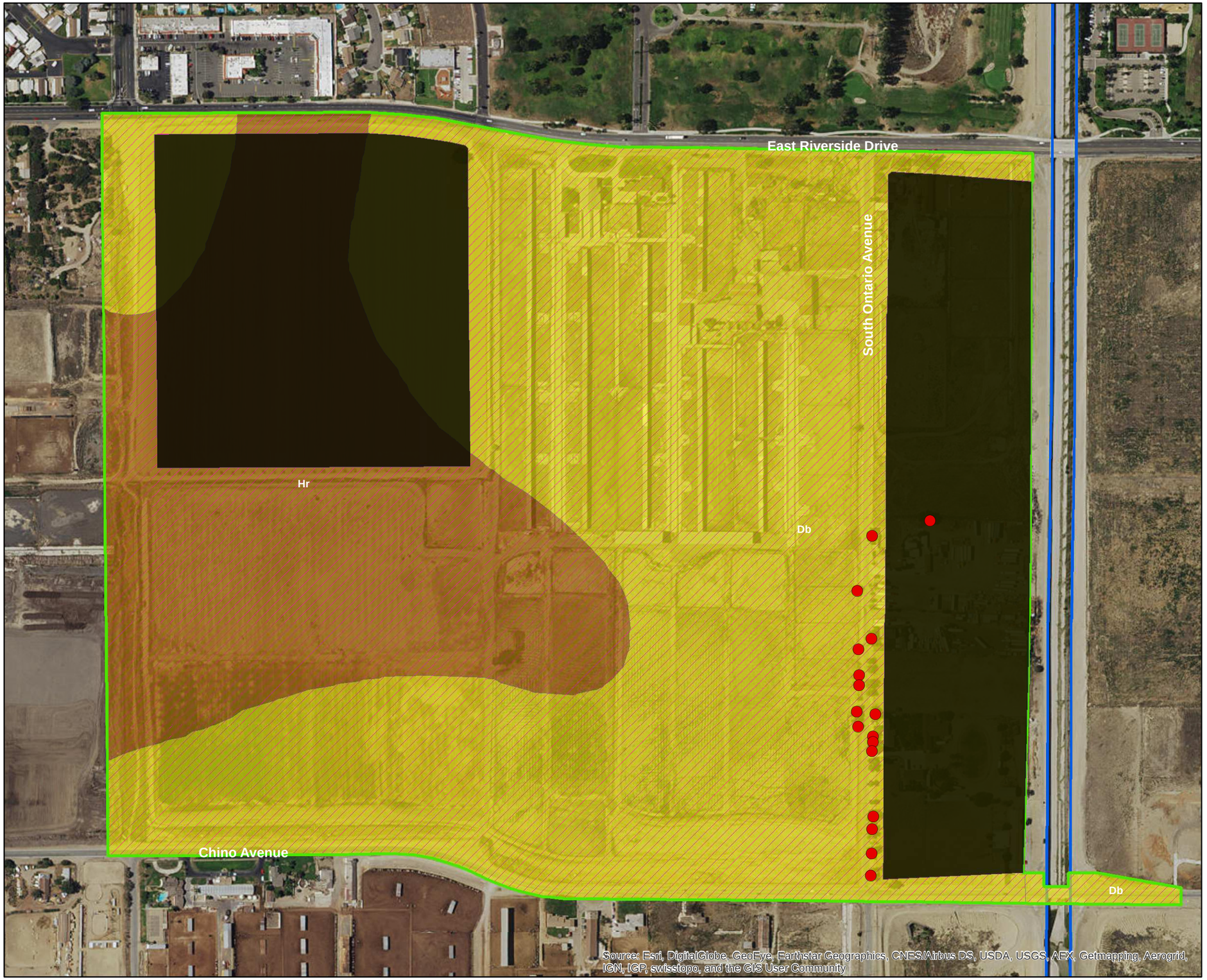
Exhibit 3

DATE REVISED: MARCH 26, 2015
DATE PREPARED: MARCH 23, 2015

TENTATIVE TRACT NO. 19966
DISTURBED AREA PLAN
DE BOER PARCELS
ARMSTRONG RANCH SPECIFIC PLAN

NEW MODEL COLONY
CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

I:\80350\PRELIM\DISTURBED AREA.dwg 3/24/15



Legend

- CVRC Project Site
- Non-CVRC Land
- Specific Plan Boundary
- Cucamonga Channel
- Db - DELHI FINE SAND
- Hr - HILMAR LOAMY FINE SAND

N

0 175 350 700

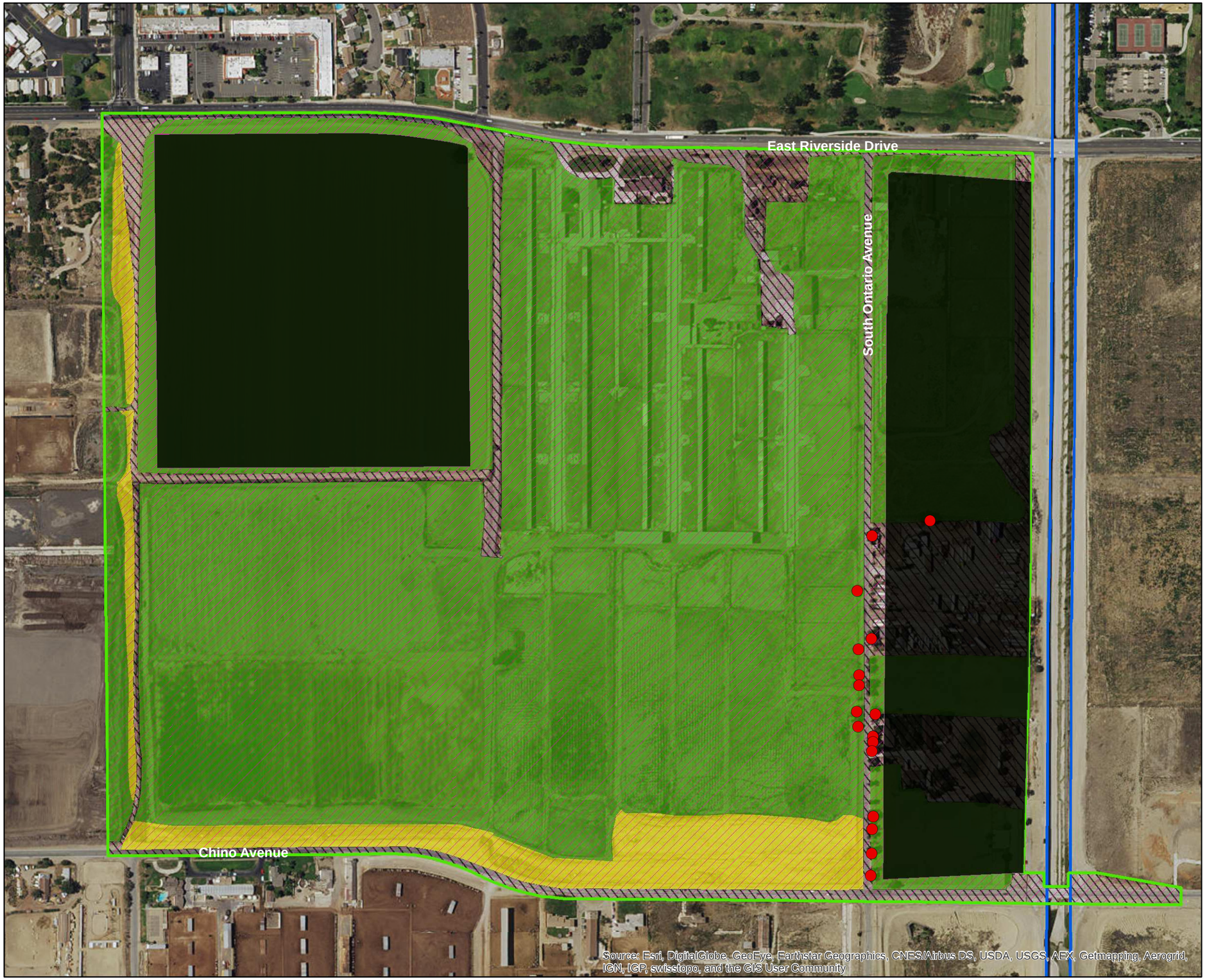
Feet

ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 4



Legend

- CVRC Project Site
- Non-CVRC Land
- Specific Plan Boundary
- Cucamonga Channel
- Agriculture
- Developed/Disturbed
- Ruderal
- Potential Raptor Nesting

N

0 175 350 700

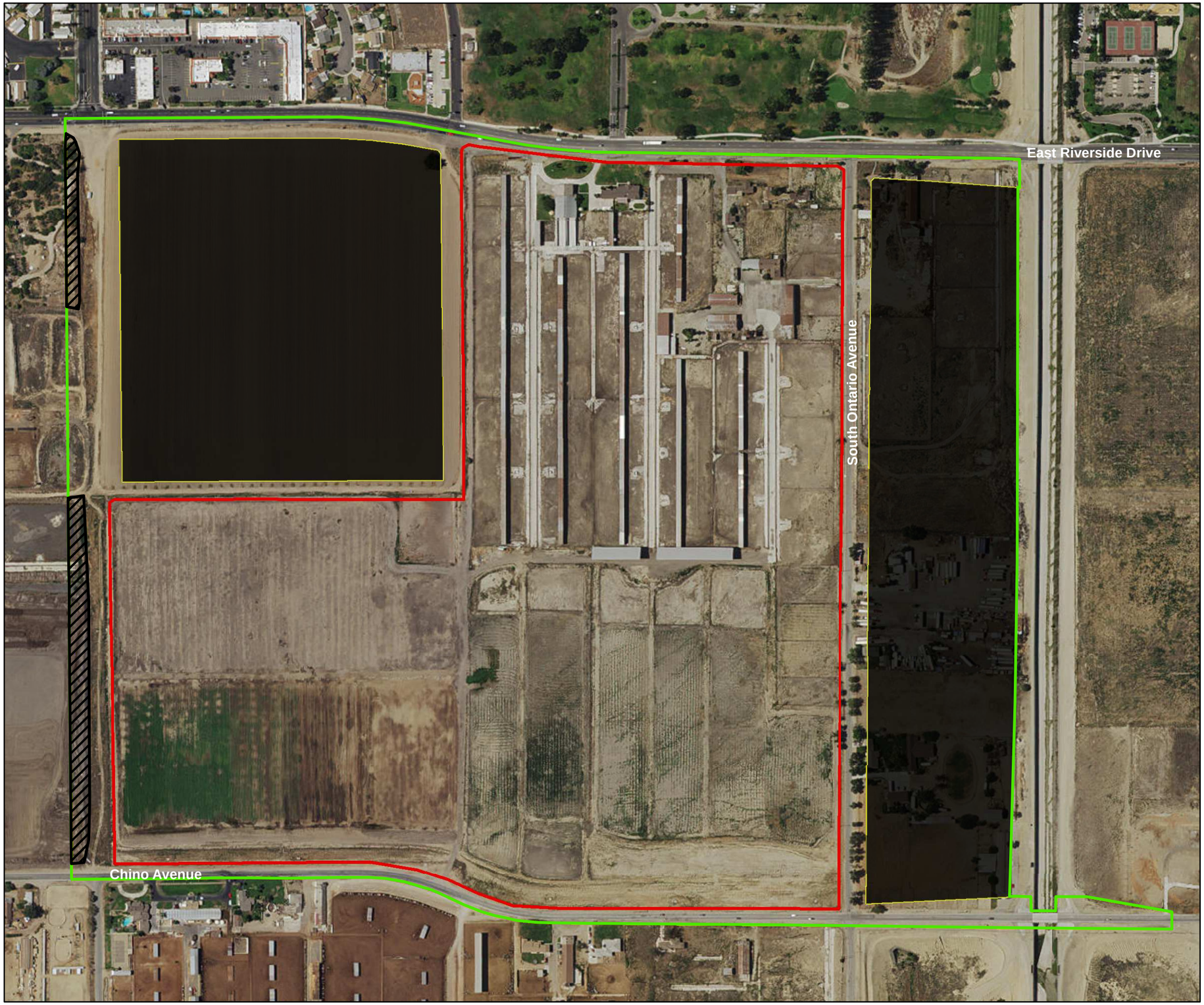
Feet

ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 5



Legend

- Unsurveyed Areas
- Specific Plan Boundary
- Non-CVRC Land
- 2014 Burrowing Owl Focused Survey Area
- 2015 Burrowing Owl Focused Survey Area*

***Surveys conducted on foot and/or visually**

N

0 175 350 700

Feet

ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Burrowing Owl Focused Survey Area Map

GLENN LUKOS ASSOCIATES

Exhibit 6

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Photograph 1: Looking south along South Ontario Avenue. View of trimmed trees along roadway.

Photograph 2: View of Cucamonga Creek Flood Control Channel at Chino Avenue crossing; looking north. Water present. No riparian vegetation.

GLENN LUKOS ASSOCIATES

Exhibit 7

Photograph 3: View of existing Chino Avenue crossing at Cucamonga Creek Flood Control Channel.

Photograph 3: Representative view of ruderal vegetation on CVRC lands; taken along Chino Avenue, looking northwest.

Armstrong Ranch – CVRC LANDS and Off-site Improvements

Site Photographs

Photograph 5: View of lands south of Chino Avenue; ruderal vegetation, abandoned dairy farm lands.

Photograph 6: View of lands south of Chino Avenue; active dairy farming.

GLENN LUKOS ASSOCIATES

Exhibit 7

Photograph 7: View of spreading grounds on CV lands; looking north.

Photograph 8: View of irrigated spreading/pasture lands; looking northwest.

Armstrong Ranch – CVRC LANDS and Off-site Improvements

Site Photographs

APPENDICES

APPENDIX A: FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows Jepson Flora Project (2013)[1]. An asterisk (*) denotes a non-native species.

GYMNOSPERMS

Pinaceae – Pine Family
* *Pinus* sp., pine

EUDICOTS

Anacardiaceae – Sumac Family
* *Schinus molle*, Peruvian Pepper-tree

Asteraceae – Sunflower Family
Ambrosia acanthicarpa, Annual Bur-sage
Erigeron canadensis, Canada Horseweed
Helianthus annuus, Common Sunflower
* *Lactuca serriola*, Prickly Lettuce
* *Senecio vulgaris*, Common Groundsel
* *Silybum marianum*, Blessed Milk Thistle
* *Sonchus oleraceus*, Common Sow Thistle
* *Verbesina encelioides*, Golden Crownbeard

Portulacaceae – Purslane Family
*- *Portulaca oleracea*, Common Purslane

Boraginaceae – Borage Family
Heliotropium curassavicum, Salt Heliotrope

Brassicaceae – Mustard Family
* *Brassica nigra*, Black Mustard
* *Lepidium* sp., peppergrass
* *Sisymbrium irio*, London Rocket

Geranaiacea – Geranium Family
* *Erodium cicutarium*, Red-stemmed Storksbill

Chenopodiaceae – Goosefoot Family
* *Atriplex semibaccata*, Berry Saltbush
* *Chenopodium album*, Lamb's-quarters
* *Chenopodium murale*, Nettle-leaved Goosefoot
* *Chenopodium* sp., pigweed
* *Salsola* tragus, Prickly Russian-thistle

Juglandaceae – Walnut Family
* *Juglans regia*, English Walnut

Malvaceae – Mallow Family
* *Malva parviflora*, Cheeseweed

[1] Jepson Flora Project (B. D. Baldwin, D. J. Keil, S. Markos, B. D. Mishler, R. Patterson, T. J. Rosatti, and D. H. Wilken, eds.) [JFP]. 2013. *Jepson Flora Project*. Accessed through 31 Oct 2014. Facets of this extensive online resource include the Jepson eFlora, available at http://ucjeps.berkeley.edu//IJM.html and Jepson Online Interchange (JOI), available at http://ucjeps.berkeley.edu/interchange.html. The latter enables searches of the Index to California Plant Names (ICPN) for nomenclature, status, and relationships, often with links to helpful details and discussion. All information incorporated here was accessed after, or confirmed accurate through, inclusion of the "Errata and Small Changes" at http://ucjeps.berkeley.edu/JM12_errata.html (dated 01 Jul 2013) and "Supplement 1 to" TJM2 at http://ucjeps.berkeley.edu/IJM_suppl_summary.html, (dated Jul 2013).

Myrtaceae – Myrtle Family
* *Eucalyptus* sp., gum tree

Polygonaceae – Buckwheat Family
* *Polygonum aviculare*, Common Knotweed

Urticaceae – Nettle Family
* *Urtica urens*, Dwarf Nettle

Zygophyllaceae – Caltrop Family
* *Tribulus terrestris*, Puncture Vine

MONOCOTS

Arecaceae – Palm Family
* *Washingtonia robusta*, Mexican Fan Palm
* *Washingtonia robusta x filifera*, Mexican/California Fan Palm hybrid

Poaceae – Grass Family
* *Arundo donax*, Giant Reed
* *Bromus diandrus*, Ripgut Brome
* *Bromus madritensis*, Spanish Brome
* *Cynodon dactylon*, Bermuda Grass
* *Hordeum* sp., barley
* *Schismus barbatus*, Mediterranean Schismus

APPENDIX B: FAUNAL COMPENDIUM

The faunal compendium lists species that were either observed within or adjacent to the Project site. Taxonomy and common names are taken from the AOU (1998 et seq.)[2] for birds, Crother (2012)[3] for amphibian, turtle, and reptile taxonomy, and Wilson and Reeder (2005)[4] for mammals.

CLASS REPTILIA: REPTILES

Phrynosomatidae – Spiny Lizard Family
Sceloporus occidentalis, Western Fence Lizard

CLASS AVES: BIRDS

Anatidae – Swan, Goose, and Duck Family
Anas platyrhynchos, Mallard

Accipitridae – Hawk Family
Accipiter cooperii, Cooper's Hawk

Charadriidae – Plover Family
Charadrius vociferus, Killdeer

Scolopacidae – Sandpiper Family
Tringa melanoleuca, Greater Yellowlegs

Laridae – Gull and Tern Family
Larus californicus, California Gull

Columbidae – Pigeon and Dove Family
* *Columba livia*, Rock Pigeon
* *Streptopelia decaocto*, Eurasian Collared-Dove
Zenaida macroura, Mourning Dove

Tyrannidae – Tyrant Flycatcher Family
Sayornis nigricans, Black Phoebe^
Sayornis saya, Say's Phoebe

Corvidae – Jay and Crow Family
Corvus brachyrhynchos, American Crow
Corvus corax, Common Raven

Alaudidae – Lark Family
Eremophila alpestris, Horned Lark

Hirundinidae – Swallow Family
Hirundo rustica, Barn Swallow
Stelgidopteryx serripennis, Northern Rough-winged Swallow

Mimidae – Thrasher Family
Mimus polyglottos, Northern Mockingbird

Sturnidae – Starling Family
* *Sturnus vulgaris*, European Starling

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[2] American Ornithologists' Union 1998. The A.O.U. Checklist of North American Birds, seventh edition. American Ornithologists' Union, Washington D.C.; and 2000, 2002, 2003, and 2004 supplements.

[3] Crother, B. I., ed. 2012. *Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding, 7th Edition*. SSAR Herpetological Circular 39:1-92. Shoreview, MN: Society for the Study of Amphibians and Reptiles, Committee On Standard English And Scientific Names.

[4] Wilson, D. E., and D. M. Reeder, eds. 2005. *Mammal Species of the World: A Taxonomic and Geographic Reference, 3rd Edition*. Baltimore, MD: Johns Hopkins University Press. Available online at http://www.bucknell.edu/msw3/browse.asp. No separate corrigenda or updates since initial publication.

Motacillidae – Pipit and Wagtail Family
Anthus rubescens, American Pipit

Parulidae – Wood-Warbler Family
Oreothlypis celata, Orange-crowned Warbler
Geothlypis trichas, Common Yellowthroat
Setophaga coronata, Yellow-rumped Warbler

Emberizidae – Sparrow Family
Passerculus sandwichensis, Savannah Sparrow
Melospiza lincolnii, Lincoln's Sparrow
Melospiza melodia, Song Sparrow
Zonotrichia leucophrys, White-crowned Sparrow

Icteridae – Blackbird and Oriole Family
Euphagus cyanocephalus, Brewer's Blackbird

Fringillidae – Finch Family
Haemorhous mexicanus, House Finch

Passeridae – Old World Sparrow Family
* *Passer domesticus*, House Sparrow

CLASS MAMMALIA: MAMMALS

Sciuridae – Squirrel Family
Spermophilus beecheyi, California Ground Squirrel

Geomyidae – Pocket Gopher Family
Thomomys bottae, Botta's Pocket Gopher

ECOLOGICAL SCIENCES, inc.

February 19, 2015

Adam Smith
CV Communities, LLC
3121 Michelson Drive, Ste. 150
Irvine, CA 92612

SUBJECT: ***Results of a Habitat Suitability Evaluation, ±112-acre Armstrong Ranch Specific Plan Site, City of Ontario, San Bernardino County, California***

Dear Adam:

This letter report presents findings of a reconnaissance-level survey conducted to generally evaluate the suitability of a ±112-acre site to support the federally-listed endangered Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*-herein DSFF).

Introduction

The site is regionally located in the City of Ontario (City), San Bernardino County, California (***Plate 1***). Specifically, the project site is located west of Ontario Avenue, east of Vineyard Avenue, south of Riverside Drive, and north of Chino Avenue. The site occurs on the "Guasti" USGS 7.5-minute topographic map, Township 2 South, Range 7 West, Section 10 (***Plate 2***). ***Plate 3*** provides an aerial photograph of the site. Projects proposed in the area that contain potentially suitable habitat to support sensitive biological resources such as the DSFF must demonstrate to reviewing agencies that potential project-related impacts to sensitive biological resources are avoided or minimized. In order to meet the environmental documentation and review requirements, potentially occurring sensitive biological resources must be addressed to demonstrate the applicant's conformance to California Environmental Quality Act (CEQA) and the federal Endangered Species Act (Act) of 1973, as amended. As such, this report is intended to provide biological information to the applicant and reviewing agencies in support of the environmental review process.

As a federally listed endangered species, the DSFF is protected under the Act. As such, federal law prohibits "take" of listed species. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct. In some cases, habitat modification can constitute prohibitive "take". A section 10(a) permit is required for projects where a determination of "take" is likely to occur during a proposed non-federal activity. If the project were to require a federal permit (e.g., USACE 404 permit), the federal agency issuing the permit would consult with the Service to determine how the action may affect the DSFF under Section 7 of the Act.

The Service routinely reviews environmental documentation for proposed development projects in the area, and as such, would recommend that any impacts to sensitive biological resources be adequately addressed and mitigated pursuant to the Act and CEQA. Due to the inherent limitations of unseasonal or habitat-based data, definitive conclusions regarding the actual presence or absence of DSFF cannot be made in this evaluation, although these limitations do not affect our conclusion that the property does not contain suitable habitat for the DSFF. Accordingly, this report is intended to provide the applicant with general information relative to the potential occurrence of DSFF based solely on the nature of habitat present.

601 GLADE DRIVE ♦ SANTA PAULA, CA 93060 ♦ TEL 805.921.0583 ♦ FAX 805.921.0683
EMAIL: SCAMERON@ECOSCIENCESINC.COM

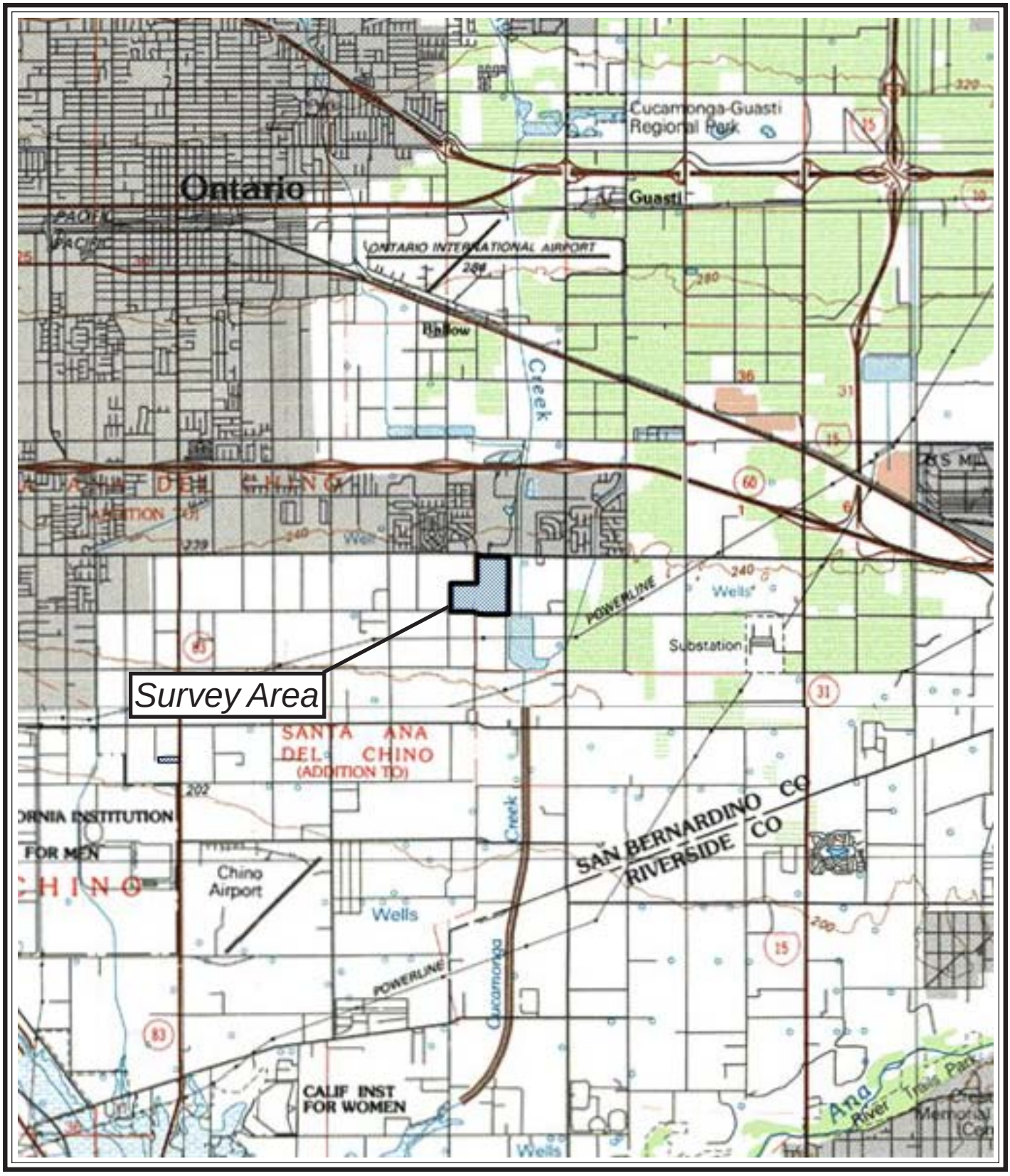

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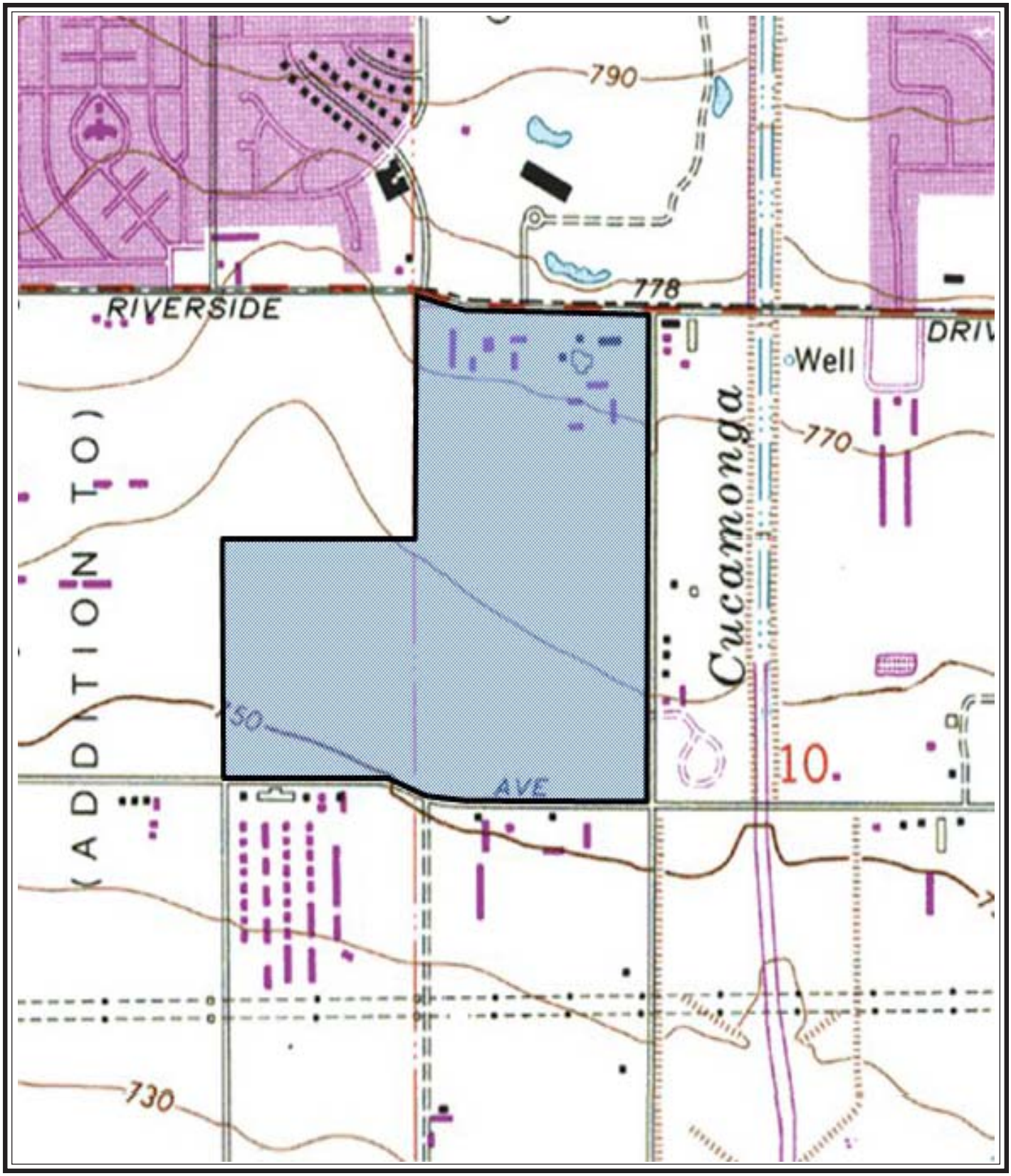
plate **1**

Regional Site Location

Armstrong Ranch Site



= Study Area Boundary

plate 2

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USGS Topographic Vicinity Map

Armstrong Ranch Site

= Study Area

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plate **3**

Aerial of Site Vicinity

Armstrong Ranch Site

Selected Species Overview

The Service listed the DSFF as an endangered species on September 23, 1993. This species is only known to occur in association with Delhi sand deposits (USFWS 1997), primarily on twelve disjunct sites within a radius of about eight miles in the cities of Colton, Rialto, and Fontana in southwestern San Bernardino and northwestern Riverside counties. However, recent survey data (1997-03) indicates that DSFF occur in low numbers in Ontario, and also in sub-optimal habitat conditions. The DSFF is restricted to the Colton Dunes, which covers approximately 40 square miles. More than 95 percent of the formerly known habitat has been converted to human uses or severely affected by human activities, rendering it apparently unsuitable for occupation by the species (Smith 1993, USFWS 1997 in Kingsley 1996).

General Habitat Characteristics

Areas containing sandy substrates with a sparse cover of perennial shrubs and other vegetation constitute the primary habitat requirements for *Rhaphiomidas* flies (USFWS 1997). Potential habitat for the DSFF is typically defined as areas comprised of sandy soil (Delhi series) in open areas commonly dominated by three indicator plant species: California buckwheat (*Eriogonum fasciculatum*), California croton (*Croton californica*), and telegraph weed (*Heterotheca grandiflora*). Annual bur-sage (*Ambrosia acanthicarpa*), Rancher's fireweed (*Amsinckia menziesii*), autumn vinegar weed (*Lessingia glandulifera*), sapphire eriastrum (*Eriastrum sapphirinum*), primrose (*Oenothera* sp.), and Thurber's buckwheat (*Eriogonum thurberi*) are also commonly present at occupied DSFF sites. In addition, insect indicator species such as *Apiocera* and *Nemomydas* are also typically associated with occupied DSFF habitat. It is also important to note that the presence or absence of indicator species does not determine presence/absence of DSFF. Rather, these indicator species exhibit a strong correlation to habitats occupied by DSFF. A gradient of habitat suitability exists for DSFF, composed of varying degrees of both natural and artificial conditions.

Federal DSF Recovery Units / Core Reserves

Subregional areas encompassing smaller areas known to be inhabited by the DSFF or encompassing areas that contain restorable habitat for the DSFF have been grouped into three Recovery Units (RUs) by the Service based on geographic proximity, similarity of habitat, and potential genetic exchange (USFWS 1997). The subject site is located within an area designated as the Ontario RU. The Ontario RU historically contained the largest block of the Colton Dunes; however, most lands in this RU have been converted to agriculture, or developed for commercial and residential projects (USFWS 1997). The Ontario RU contains several areas that currently support DSFF, and additional areas have been proposed for restoration in the DSFF Recovery Plan. The occupied and/or potentially restorable habitat in the RUs includes only those areas that, at a minimum, contain Delhi Series soils. Further, RUs do not include residential and commercial development, or areas that have been otherwise permanently altered by human actions (USFWS 1997). DSFF will continue to exist in the Ontario RU only with land conservation, a cessation of current habitat-degrading land management practices and recreational uses, and/or a restoration or natural reversion of ecologically damaged lands back to an ecological community typical of Delhi sands formations.

Potentially suitable habitats remaining in the Ontario RU are highly fragmented, and as such, the establishment of a permanent long-term reserve in this RU is currently unresolved. While many degraded sites are currently unsuitable to support DSFF, DSFF have been recorded on certain properties that have been heavily disturbed in the past (e.g., previously graded and/or scraped sites where a cessation of disturbance-related land uses have occurred such that a degree of natural conditions now occur). Accordingly, DSFF may persist on, or disperse to, certain properties that have not been exposed to recurring and/or recent land disturbances. These previously disturbed properties may be important for future preservation of the species in the region. In addition, individual DSFF have been recorded in areas generally considered unsuitable to support this taxon, and with no apparent connectivity to occupied DSFF habitats.

Additional data will be needed on reproduction and mortality rates, dispersal, and habitat variables before further refinement of RU boundaries, development of alternative RU preserve designs, and analyses of population can be made (USFWS 1997). Until such data is obtained, the highest priority will be to protect existing populations of the DSFF (USFWS 1997). To achieve downlisting, areas containing occupied and/or restorable habitat and dispersal corridors need to be evaluated relative to the extent of distribution patterns necessary to support secure populations. Sites to be protected should be selected based on habitat needs of adults and larvae, and willingness of landowners to participate in recovery efforts (USFWS 1997). Several "Core Reserve Areas" have been initially identified by the Service, but to our knowledge, the actual extent of the proposed reserve areas has not been finalized.

Focused DSFF Survey Guidelines

The Service prepared Presence/Absence Survey Guidelines for the DSFF in December 1996 (USFWS 1996), with revisions in April 2004. In general, the guidelines maintain that in order to more fully determine the presence or absence of DSFF such that the results are acceptable to the Service, a survey following these guidelines must be conducted. The guidelines require that surveys be conducted in all areas containing Delhi sands twice weekly (two days per week) during the single annual flight period from July 1 to September 20. However, at the discretion of the Service, survey guidelines may be modified depending upon individual site circumstances (e.g., highly degraded sites that don't support constituent elements of potential DSFF habitat or early seasonal emergence periods). During the environmental review process, recommendations to perform focused DSFF surveys are evaluated by reviewing agencies on a site-by-site basis.

Methodology

Literature Search

Documentation pertinent to the biological resources in the vicinity of the site was reviewed and analyzed. Information reviewed included: (1) the Federal Register listing package for the federally listed endangered DSFF; (2) literature pertaining to habitat requirements of DSFF; (3) the California Natural Diversity Data Base (CNDDB 2015) information regarding sensitive species potentially occurring on the site for the "Corona North" and surrounding USGS 7.5-minute quadrangle maps, and (4) review of any available reports from the general vicinity of the project site.

2015 DSFF Habitat-Suitability Evaluation

Ecological Sciences conducted a reconnaissance-level field survey on the subject site to evaluate potential habitat for DSFF on February 13, 2015. The survey was conducted by Scott Cameron, Principal Biologist of Ecological Sciences, Inc. Mr. Cameron holds a current federal permit to conduct focused survey for this species (TE-808642-8). Ecological Sciences biologists have observed numerous DSFF in the field since 1995, and have extensive experience conducting both focused surveys and habitat evaluations for this sensitive taxon. Ecological Sciences is well versed with the biotic characteristics of a range of habitats occupied by DSFF, as well as other sensitive wildlife species potentially occurring in the area. The site was examined on foot by walking a series of meandering transects across the subject property. As mentioned, the primary objective of the one-day field visit was to generally evaluate the site's potential to support DSFF. Dominant plant species and other habitat characteristics present at the site were identified to assess the overall habitat value. Weather conditions included clear skies, 0-1 breezes, and ambient temperatures of 77-85 ºF.

Existing Biological Environment

The subject site is characterized as an abandoned dairy with associated infrastructure. The site contains former single-family residences, multiple dairy-related structures (sheds, corrals, etc.), feeding

preparation areas, numerous waste ponds/basins, disced fields, pastures, and manure/debris spreading areas. The peripheral ruderal/disturbed areas support mostly invasive, non-native annual species. Manure is present throughout much of the site. A dense layer of exotic grasses generally cover on-site pasturelands and manure spreading areas. Cattle feeding areas consisted of mostly barren ground covered in manure. Surrounding land uses include agricultural areas similar to the subject site. ***Plates 4a-4b*** photographically illustrate existing conditions.

Vegetation

Ruderal plants recorded on site included various non-native grasses and weedy species such as foxtail chess (*Bromus madritensis spp. rubens*), ripgut grass (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), Mediterranean grass (*Schismus barbatus*), barley (*Hordeum marinum*), filaree (*Erodium* sp.), Lamb's quarter's (*Chenopodium album*), pigweed (*Chenopodium* sp.), milk thistle (*Silybum marianum*), Russian thistle (*Salsola tragus*), puncture vine (*Tribulus terrestris*), black mustard (*Brassica nigra*), cheeseweed (*Malva parviflora*), giant reed (*Arundo donax*), and nettle (*Urtica* sp.). Landscaping species such as fan palm (*Washingtonia robusta*) were also present. Overall non-native vegetative cover is about 95-100 percent in the pastureland/spreading areas.

General Soils Analysis / Soil Conservation Map Review

A review of soil maps prepared for the area by the Natural Resource Conservation Service (NRCS) indicate that the subject site is located within an area mapped as containing Delhi fine sand (Db), and Hilmar loamy fine sand (Hr). However, various long-standing anthropogenic site disturbances have significantly altered the site's mapped surface soil characteristics. A general soils analysis was conducted due to the close association of DSFF to mostly open, sandy friable soils. No characteristic Db soils were recorded on site. ***Plate 5*** illustrates mapped soils.

Discussion

DSFF have relatively narrow habitat requirements that are determined by appropriate plant species and open sand as defining characteristics (Kingsley 1996). It has long been established that a gradient of suitability exists composed of varying degrees of natural and artificial conditions. Observations such as the DSFFs apparent avoidance of dense (both native and non-native) vegetation (>75% coverage) or general avoidance of vegetation that is sparse or not present at all (<5% coverage) appear to suggest that DSFF generally select habitats with a combination of some vegetation, including several species of plants, and some open space with bare sand (Kiyani 1996). The presence of Delhi soils appears to be the most determinative factor of whether an area can provide suitable DSFF habitat. Delhi sands constitute the primary component of a complex ecosystem. A variety of microhabitat characteristics generally constitute potential DSFF habitat (e.g., Delhi soils, vegetation composition, soil chemistry, topography, percent vegetative cover, frequency of non-native plant species, exposure to disturbances, etc.).

While the aforementioned microhabitat conditions are considered optimal/essential to support DSFF, DSFF sometimes occur in areas not typically considered suitable for this taxon. Although individual DSFF have been recorded from sites supporting mostly ruderal, non-native vegetation, most known DSFF-occupied sites contain areas, or are adjacent to areas, of relatively undisturbed exposed patches of friable, sandy soils in association with selected native plant species. History of DSFF colony sites indicates that previously disturbed (by grading, certain types of agriculture, etc.) Delhi sands formations may revert over a few years (through erosion, aeolian processes, fossorial animal activity, and natural vegetative succession) back to conditions capable of supporting DSFF populations. However, these natural processes are dependent upon a cessation of disturbance-related land uses, which prevent the natural reestablishment of a more characteristic Delhi sand community (associated with potential DSFF habitat).

View to west from eastern property boundary

View to north near center of site

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plate **4a**

Site Photographs

Armstrong Ranch Site

View to east near center of site

View to south near center of site

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plate **4b**

Site Photographs

Armstrong Ranch Site

Source: Natural Resources Conservation Service (NRCS-website accessed January 2015)

= Study Area Boundary
= Extent of Soil Analysis

Soil Map Key
Db=Delhi fine sand
Hr=Hilmar loamy fine sand

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***plate* 5**

Project Area Soils

Armstrong Ranch Site

Absent changes in existing land uses, or implementation of a revegetation/restoration effort, the establishment of a more characteristic Delhi sand community (associated with potential DSFF habitat) on the site would be prevented due to deleterious changes in soil chemistry and intensive soil disturbances associated with long-standing use of the site as a dairy. Approaches to habitat restoration will vary from simple, relatively inexpensive, and predictably successful (in cases of enhancing partially occupied sites that are weed overgrown) to complex, costly, and unpredictable (in cases of manured or imported fill sites). Disruption of substrate is deleterious to DSFF habitat because it destroys the cryptoflora crust, which is important to resisting microorganisms and maintaining ecosystem integrity (Belnap 1994 in USFWS 1997). Similarly, the presence of extensive amounts of manure greatly reduces or eliminates the potential use of the site by DSFF. The presence of manure degrades potential DSFF habitat, as manure smothers animals, plants, and habitat where it is dumped (USFWS 1997). According to the DSFF Recovery Plan (USFWS 1997), manure also provides high levels of nutrients for invasive exotic plants such as those recorded in dense coverages on the site. Moreover, restoration of manured sites, although possible, is of the lowest priority according to the DSFF Recovery Plan (USFWS 1997). There exists, in our opinion, no possibility of DSFF to occur on the subject property or on such habitats as exemplified by this property, and were DSFF introduced to the site in its current condition, DSFF could not become established or persist on the site.

There is no connectivity to the subject site from the nearest known (to us) DSFF population (±2.5 miles northeast of the site) due to the presence of existing development that entirely surrounds the site. While this species likely has the capability of dispersing over relatively large distances of seemingly unsuitable habitats under certain circumstances, it would be reasonable to assume (based on our current knowledge of the species) that the likelihood of DSFF dispersing to the subject site from the nearest known off-site occupied (or historically occupied) site would be extremely low despite the fact that variables such as the length, width, and structural characteristics of dispersal corridors are not fully understood. Accordingly, the subject site would not be considered a viable property for preservation or restoration due to current land use, absence of suitable habitat, geographic location. isolation from undeveloped areas or areas supporting DSFF populations, and surrounding land uses which have long since fragmented potential DSFF habitat in the area.

Conclusion

Based on results of the February 2015 habitat suitability evaluation, existing conditions present at the site are not consistent with those known or expected to support DSFF. No exposed natural or semi-natural open areas with unconsolidated wind-worked granitic soils or dunes are present. Exposure to extensive substrate disturbances (e.g. abandoned dairy) have substantial negative effects on potential DSFF habitat and prevents potentially suitable DSFF microhabitat conditions from developing. Substrate conditions are not consistent with those most often correlated with potential DSFF habitat and no DSFF plant associations are present on site.

Under current conditions, the site would generally be considered prohibitive to DSSF occupation. The underlying soil environment appears to be the most definitive factor of whether an area could potentially support DSFF. Accordingly, the quality of Delhi soils present within the study area was rated for its potential to support DSFF. The area mapped as Delhi soils was visually inspected and rated based on a scale of 1 to 5, with 5 being the best quality and most suitable habitat in the biologist's judgment:

1. Soils dominated by heavy deposits of alluvial material including coarse sands and gravels with little or no Delhi sands and evidence of soil compaction. *Unsuitable.*

2. Delhi sands are present but the soil characteristics include a predominance of alluvial materials (Tujunga Soils). *Very Low Quality.*

3. Although not clean, sufficient Delhi sands are present to prevent soil compaction. Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality*.

4. Abundant clean Delhi sands with little or no alluvial material or Tujunga soils present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. *Moderate Quality*

5. Sand dune habitat with clean Delhi sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. *High Quality*

Based on the above ratings and existing site conditions, the study area would be considered *Unsuitable* for DSFF. In view of the site's highly degraded and isolated condition, exposure to significant surface disturbances, and analyses of correlative habitat information from a wide range (e.g., relatively disturbed to more natural habitats) of occupied DSFF habitats in the region, the ±112-acre site does not contain habitat suitable to support or sustain a viable DSFF population. Therefore, no impacts to DSFF are expected and no mitigation is required for less than significant impacts under CEQA.

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological survey, and that the facts, statements, and information presented herein are true and correct to the best of my knowledge and belief.

Sincerely,

Ecological Sciences, Inc.

Scott D. Cameron
Principal Biologist

References

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BIOLOGICAL TECHNICAL REPORT

FOR PORTIONS OF

THE ARMSTRONG RANCH SPECIFIC PLAN
(Remaining Lands – Non-CVRC Ontario Investment, LLC Properties)

LOCATED IN THE CITY OF ONTARIO, SAN BERNARDINO, CALIFORNIA

Prepared For:

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August 19, 2015

INFORMATION SUMMARY

A. Report Date: August 19, 2015

B. Report Title: Biological Technical Report for Portions of the Armstrong Ranch Specific Plan (Remaining Lands – Non-CVRC Ontario Investment, LLC Properties)

C. Project Site Location: City of Ontario, San Bernardino County, California

D. Prepared For: Allen Matkins Leck Gamble Mallory & Natsis LLP
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F. Report Summary: Two biological reports were performed for the Armstrong Ranch Specific Plan (Specific Plan) Project, located in the City of Ontario, San Bernardino California. The Project consists of the Specific Plan area, which is approximately 199 acres of land, and approximately 7.5 acres of associated potential off-site improvement plans. As illustrated in Exhibit 3, this report addresses the impacts associated with the development of the "Non-CVRC Project site", which consists of approximately 60.8 acres covered by the Specific Plan but not controlled by CVRC Ontario Investments. Nor does the Non-CVRC Project site include any of the off-site improvement plans.

In order to better address the biological impacts expected to occur in connection with development of the Project, a second report prepared simultaneously with this report evaluates biological resources for the remaining lands within the Armstrong Specific Plan, which are controlled by CVRC and includes the off-site improvement plans.

The Project, including the Non-CVRC Project site, would consist of a residential community, including a school, on roughly 199 acres of land, as well as associated off-site road improvements on 7.5 acres. This report discloses the impacts associated with development of the Non-CVRC Project site, by describing the results of the results of a field study (from perimeter of Non-CVRC Project site) performed to evaluate the potential occurrence of biological resources and the requirements triggered by environmental laws and regulations. Habitat assessments were performed for special-status plants and animals and a jurisdictional waters evaluation was conducted. There is

no potential for special-status plants to be present, and thus development of the Non-CVRC Project site will not generate any significant impacts to special-status plants. Similarly, no jurisdictional water resources are present on the Non-CVRC Project site and hence no significant impacts to jurisdictional water resources will occur from development of the Non-CVRC Project site. The Non-CVRC Project site provides little value to biological resources. There is potential for several special-status birds (white-tailed kite, loggerhead shrike) to be present but these potential impacts are considered to be less than significant under CEQA. The Non-CVRC Project site does support potential habitat for burrowing owl. A focused survey for burrowing owl will need to occur. With implementation of avoidance measures presented in Section 6.1 of this report, direct impacts to burrowing owl would be avoided and potential impacts to this species would be less than significant under CEQA. There is no potential for any federal or state listed species to be present on the Non-CVRC Project site, and thus there are no significant impacts to listed species from development of the Non-CVRC Project site.

G. Individuals Conducting Fieldwork: Martin Rasnick and Tricia Campbell.

TABLE OF CONTENTS

TABLES

FIGURES

EXHIBITS - Attached

APPENDICES - Attached

1.0 INTRODUCTION

1.1 Background and Scope of Work

This report provides the results of general biological surveys and focused biological surveys for the Non-CVRC Project site. For this report, the term *Specific Plan Area* is defined as the entire 206.5 acres of land, including off-site improvements while the term *Non-CVRC Project site* is defined as the 60.8-acre portion of the Specific Plan Area not controlled by CVRC Ontario Investments, LLC and not including proposed off-site improvements. A separate report[1] evaluates biological resources for the remaining lands within the Specific Plan area that are controlled by CVRC. The Project (and the Non-CVRC Project site) is located in the City of Ontario, San Bernardino County, California [Exhibits 1 and 2]. This report identifies and evaluates potential impacts to biological resources associated with the proposed development of the Non-CVRC Project site in the context of the California Environmental Quality Act (CEQA), State and Federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), California Water Code (CWC) [the Porter-Cologne Water Quality Control Act], and the state Fish and Game Code.

The scope of this report includes a discussion of existing conditions on the Non-CVRC Project site, all methods employed regarding the potential jurisdictional resources evaluation, general biological survey, the documentation of botanical and wildlife resources identified (including any special-status species), and an analysis of potential impacts to biological resources. Methods of the study included a review of relevant literature, a field survey (visual only), and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

The field study focused on the following objectives to comply with CEQA requirements, including (1) general reconnaissance survey and vegetation mapping; (2) a general biological survey; (3) habitat assessments for special-status plant and wildlife species; (4) an analysis of potential biological impacts caused from development of the Non-CVRC Project site; and (5) an analysis of potential impacts to U.S. Army Corps of Engineers, CDFW, and Santa Ana Regional Water Quality Control Board (Regional Board) jurisdictional waters caused from development of the Non-CVRC Project site. Observations of all plant and wildlife species were recorded during the field study visits and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

[1] Glenn Lukos Associates. 2015. Biological Technical Report for the Armstrong Ranch Specific Plan, Tentative Tract 19966 (CVRC Ontario Investment, LLD Properties and Off-site Improvement Lands), Located in the City of Ontario, San Bernardino, California. Prepare for John Condas at Allens Matkins Leck Gamble Mallory & Natsis, LLP. Dated July 2015

1.2 Project Location

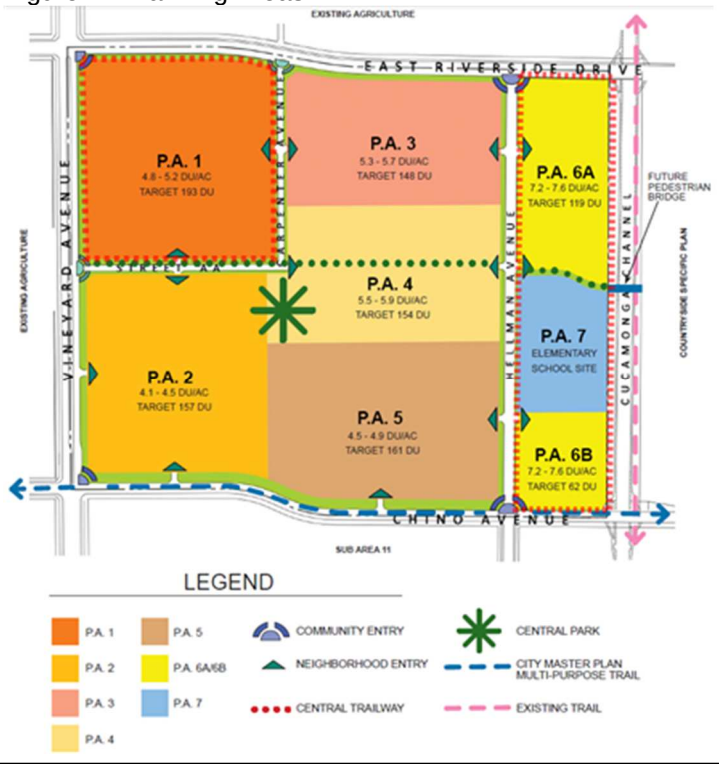
The Specific Plan comprises approximately 206.5 acres of lands (including off-site improvements) in the City of Ontario, San Bernardino County, California [Exhibit 1 – Regional Map] and is located west of the Cucamonga Creek Flood Control Channel, east of the proposed Vineyard Avenue extension, south of East Riverside Drive, and north of Chino Avenue. The site occurs within Section 10, Township 2 South, and Range 7 West, San Bernardino Baseline and Meridian, on the Guasti U.S. Geological Survey (USGS) 7.5" quadrangle map [Exhibit 2 – Vicinity Map]. Existing land uses on adjacent lands include active and inactive dairy agriculture, golf course, residential, and commercial.

1.3 Project Description

As illustrated in Exhibit 3, this report addresses the impacts associated with the development of a portion of the Specific Plan, called the *Non-CVRC Project site* that encompasses 60.8 acres of land and comprises Planning Areas 1, 6, and 7 (red dash areas).

In order to better address the biological impacts expected to occur in connection with development of the remainder of the Specific Plan, a second report prepared simultaneously with this report, evaluates biological resources for the remaining lands within the Armstrong Specific Plan (Figure 1, *PAs 2 through 5 and off-site improvements*).

Figure 1. Planning Areas



The Specific Plan allows for the development of up to 994 residential dwelling units comprised of a variety of single-family detached homes dwellings. Residential land use areas are contained within seven distinctive neighborhood Planning Areas (PAs) linked by a network of street-separated sidewalks and bicycle trails connecting all neighborhoods to parks and off-property trail systems.

The Specific Plan permits flexibility in the distribution of residential types within each residential PA. A maximum number of dwelling units for each PA are established as described in Table 1-1, below. The residential home types described in the Specific Plan are permitted for development within any PA. The total number of residential dwelling units developed within

each PA may be exceeded by up to 15% of the maximum number of dwelling units established for the PA, provided the total number of dwelling units developed within the project does not exceed 994. The specific residential type and mix of types to be developed in each PA will be determined at the time of tentative tract map approval by the City of Ontario for each development project within Armstrong Ranch. As shown in Table 1-1, up to 374 dwellings are proposed for development within the Non-CVRC Project site, along with a potential school site. The remaining 620 dwellings are proposed for PAs 2 through 5.

Off-site improvements

The proposed road improvements to Chino Avenue would involve improving the existing bridge crossing of Chino Avenue over the Cucamonga Creek Flood Control Channel. There will be no temporary or permanent structures placed in the channel or its side walls as part of bridge improvements. Any proposed improvements would clear span the channel. Other off-site improvements include street widening and trails along South Ontario Avenue and the extension of Vineyard Avenue north to East Riverside Drive.

Table 1-1. Land Use Plan Summary

Land Use Residential Single Family	**Gross Acres (ac.)**	**Net Acres (ac.)**	**Dwelling Units (DU)**	**Gross Density (DU/ac.)**	**Net Density (DU/ac.)**
PA 1	38.6	33.0	193	5.0	5.8
PA 2	36.2	32.5	157	4.3	4.8
PA 3	26.8	24.6	148	5.5	6.0
PA 4	26.9	26.9	154	5.7	5.7
PA 5	34.2	32.6	161	4.7	4.9
PA 6	24.5	21.0	181	7.4	8.6
PA 7	11.6	10.0	0	0.0	0.0
Roadways		10.6			
Enhanced Neighborhood Edges		7.6			
Total	198.8 ac.	198.8 ac.	994	5.0 DU/ac.	5.5 DU/ac.

1.4 Existing Conditions

The Specific Plan Area, including on-site and off-site lands, is composed of open lands used for dairy farming (including feeding and spreading grounds), crops, equestrian (corrals), trucking yard(s), abandoned farm lands, and the Cucamonga Creek Flood Control Channel (along the east boundary). A few single-family rural residential homes occur along East Riverside Drive, South Ontario Avenue, and Chino Avenue. Soil surfaces reflect past and ongoing manipulation to support past and present agricultural uses. Manure is present throughout much of the Specific Plan Area. A dense layer of exotic grasses generally cover the pasturelands and manure spreading areas. Cattle feeding areas consist of mostly barren ground covered in manure. The Non-CVRC Project site is similar to the Specific Plan Area like that of the Specific Plan Area, but without active dairy operations.

Ground topography for both the Specific Plan Area and the Non-CVRC Project site is shallow and the slope is slight, with the southernmost portions of the Non-CVRC Project site at about 750 feet and the northernmost portion at about 775 feet elevation. Soils are mapped as Delhi Fine Sand and Hilmar Loamy Fine Sand [Exhibit 4 - Soils] by the Natural Resource Conservation Service (NRCS).

No natural or semi-natural vegetation communities are present and vegetation on the Specific Plan Area (including the Non-CVRC Project site) included various non-native grasses and weedy species.

The Specific Plan Area and the Non-CVRC Project site support biological resources conducive/adapted to highly degraded and manipulated landscapes. The Cucamonga Creek Flood Control Channel is a federal and state jurisdictional water resource that is fully concrete-lined (concrete-bottom and concrete-sided) and supports no vegetation at, or within 200-feet of, the Chino Avenue overcrossing.

2.0 METHODS

In order to adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (GLA) assembled biological data consisting of three main components:

- Performance of a jurisdictional waters and wetlands evaluation;
- Performance of vegetation mapping for the Non-CVRC Project site; and
- Performance of habitat assessments, and a visual-only biological survey to evaluate the presence/absence of special-status species in accordance with the requirements of CEQA.

All biological resources field work for the Non-CVRC Project site occurred from the perimeter lands, using binoculars as needed. No physical access was made to the Non-CVRC Project site lands.

A visual review of the Non-CVRC Project site was made by Martin Rasnick (GLA senior regulatory specialist) on April 10, 2015 to evaluate the presence of potential jurisdictional waters and wetlands regulated under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the CWA, the CDFW pursuant to Section 1602 of the Fish and Game Code, and Santa Ana Regional Water Quality Control Board (Regional Board) pursuant to Section 401 of the CWA or Section 13260 of the CWC [the Porter-Cologne Water Quality Control Act].

The focus of the biological survey was determined through initial site review using aerial images, a review of the CNDDB [CDFW 2015], CNPS 8th edition online inventory (CNPS 2015), NRCS soil data, other pertinent literature, and knowledge of the region. A site-specific general survey for the Non-CVRC Project site was conducted on April 10, 2015 by Tricia Campbell.

Due to highly disturbed site conditions there are no natural vegetation alliances or associations fitting or approaching criteria for membership rules in A Manual of California Vegetation, Second Edition or MCVII (Baldwin et al 2012), which is the California expression of the National Vegetation Classification. Vegetation present is relatively sparse overall and reflects ornamental plantings (e.g. nonnative trees) or spontaneous, herb-dominated species strongly adapted to anthropogenic disturbance. Vegetation present was mapped directly onto a 200-scale (1"=200') aerial photograph and all species identified on the Non-CVRC Project site during vegetation mapping are included in the floral compendium prepared for the Specific Plan Area [Appendix A].

2.1 Summary of Surveys

GLA conducted the biological study in order to identify and analyze actual or potential impacts to biological resources associated with development of the Non-CVRC Project site. Observations of plant and wildlife species were recorded during the above mentioned survey effort as well as during studies conducted on the remaining Specific Plan Area lands. A list of plants and animals detected during studies for the Project is provided in Appendices A and B [Appendix A: Floral Compendium and Appendix B: Faunal Compendium].

The evaluation conducted for the Non-CVRC Project site included the following:

- Potential jurisdictional waters and wetlands evaluation;
- Vegetation mapping; and
- Habitat assessments to evaluate the potential presence/absence of special-status species (or potentially suitable habitat) to the satisfaction of CEQA and federal and state regulations.

Table 2-1 provides a summary of survey types, survey dates, and personnel.

Table 2-1. Summary of Biological Surveys for the Non-CVRC Project site.

Survey Type	Survey Dates	Biologists
Evaluation for Waters and Wetlands	4/10/2015	Martin Rasnick
General Survey, Vegetation Mapping, and Habitat Assessments	4/10/2015	Tricia Campbell

Individual plant and wildlife species are evaluated in this report based on their "special status." For the purpose of this report, plants are considered of "special status" based on one or more of the following criteria:

- Listed under the Federal and/or California Endangered Species Act (ESA, CESA); and/or
- California Rare Plant Rank of 1A, 1B, 2A, 2B, 3, or 4.

Wildlife species are considered of "special status" based on one or more of the following criteria:

- Listed under the Federal and/or California Endangered Species Act (ESA, CESA); and/or

- Designation as a state Species of Special Concern (SSC) or Fully Protected (SFP) species.

Vegetation communities and habitats are considered of "special status" based on their occurrence in the CNDDB inventory.

2.2 Botanical Resources

A site-specific assessment program designed to accurately document the botanical resources within the Non-CVRC Project site, consisted of the following components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Non-CVRC Project site; (3) general field reconnaissance survey; (4) vegetation; and (5) habitat assessments for all special-status plants initially considered for potential to occur. No focused survey for plants was determined to be needed.

2.2.1 Literature Search

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- CNPS *Inventory of Rare and Endangered Plants of California* (CNPS 2015); and

- CNDDB for the nine USGS 7.5' quadrangles centered on the Guasti, California, quadrangle area, thus including that of the Mount Baldy, Devore, Cucamonga Peak, Prado Dam, Riverside West, Fontana, Ontario, and Corona North California, quads (CNDDB 2015).

2.2.2 Vegetation Mapping

Vegetation cover was mapped in the field directly onto a 200-scale (1"=200') aerial photograph. A vegetation map is included as Exhibit 5. Representative site photographs are included as Exhibit 6.

2.2.3 Special-Status Plant Species and Habitats Evaluated for the Project Site

A literature search was conducted to obtain a list of special-status plants with the potential to occur within the Non-CVRC Project site. The CNDDB (CDFW 2015a) was initially consulted for documented occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program include the CNPS Online Inventory (2015) and CDFW (2015b).

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Non-CVRC Project site were developed and incorporated into a mapping and survey program to achieve the following goals: (1) characterize the

vegetation and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special-status plants that may occur within the Non-CVRC Project site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Non-CVRC Project site, if applicable.

2.2.4 Botanical Surveys

GLA biologist Tricia A. Campbell performed a Non-CVRC Project site evaluation on April 10, 2015 and conducted vegetation mapping and habitat assessments for plants. The assessments were conducted from the perimeter of the Non-CVRC Project site lands. All plant species encountered during the field visit were identified and recorded. A complete list of the plant species observed in the Specific Plan Area as well as the Non-CVRC Project site is provided in [Appendix A - Floral Compendium]. Scientific taxonomy and nomenclature used in this report follow Baldwin et al (2012).

2.3 Wildlife Resources

Wildlife species were evaluated and detected during the field survey by sight, call, tracks, and scat. Site reconnaissance was conducted from perimeter lands, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of vertebrate wildlife species detected within the Specific Plan Area and Non-CVRC Project site is provided in Appendix B, Faunal Compendium. Scientific nomenclature and common names for species referred to in this report follow Crother (2012) for amphibians and reptiles, the American Ornithologists' Union Checklist 7th Edition (1998 with supplements through 2014) for birds, and Wilson and Reeder (2005) for mammals. Methods for the general survey and habitat assessments including any applicable survey protocols are included below.

2.3.1 General Surveys

Birds
During the general biological survey for the Non-CVRC Project site, birds were identified incidentally. Birds were detected by both observation and vocalizations and species were recorded in field notes.

Mammals
During the general biological survey for the Non-CVRC Project site, mammals were identified incidentally. Mammals were detected by both observation and the presence of diagnostic sign (e.g. tracks, burrows, scat) and species were recorded in field notes.

Reptiles and Amphibians
During the general biological survey for the Non-CVRC Project site, a single species of reptile was identified incidentally. Reptiles were looked for by both observation and the presence of diagnostic sign (e.g. shed skins, scat, tracks, snake prints, and lizard tail drag marks) and species were recorded in field notes.

2.3.2 Special-Status Animal Species Evaluated for the Project Site

A literature search was conducted in order to develop a list of special-status wildlife species with potential to occur within the Non-CVRC Project site. Species were evaluated based on factors including: (1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Non-CVRC Project site, and (2) any other special-status animals that are known to occur within the vicinity of the Non-CVRC Project site or for which potentially suitable habitat occurs on the Non-CVRC Project site.

2.3.3 Habitat Assessment for Special-Status Animal Species

GLA biologist Tricia A. Campbell conducted habitat assessments for special-status animal species on April 10, 2015. An aerial photograph, soil map and/or topographic map were used to determine potential vegetation types and other physical features that may support special-status species within the Non-CVRC Project site.

2.3.4 Focused Surveys for Special-Status Animals Species

No focused surveys were performed on the Non-CVRC Project site as access was not provided.

2.4 Jurisdictional Resources Evaluation

A review of the Non-CVRC Project site as well as past historic aerial photography was made by Martin Rasnick on April 10, 2015 to evaluate the presence of potential jurisdictional waters and wetlands regulated under the Corps pursuant to Section 404 of the CWA, the CDFW pursuant to Section 1602 of the Fish and Game Code, and the Regional Board pursuant to Section 401 of the CWA or Section 13260 of the CWC [the Porter-Cologne Water Quality Control Act].

3.0 REGULATORY SETTING

Development of the Non-CVRC Project site is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state-and federally-listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

3.1 State and/or Federally Listed Plants or Animals

3.1.1 State of California Endangered Species Act

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease."

The State defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species." Candidate species are defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list." Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating "No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided." Under the CESA, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Exceptions authorized by the state to allow "take" require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

3.1.2 Federal Endangered Species Act

The FESA of 1973 defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to "take" any listed species. "Take" is defined in Section 3(18) of FESA: "...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Further, the USFWS, through regulation, has interpreted the terms "harm" and "harass" to include certain types of habitat modification that result in injury to, or death of species as forms of "take." These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

3.1.3 State and Federal Take Authorizations for Listed Species

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

3.2 California Environmental Quality Act

3.2.1 CEQA Guidelines Section 15380

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

3.2.2 Non-Listed Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA

Federally Designated Special-Status Species

All references to federally protected species in this report (whether listed, proposed for listing, or candidate) include the most current published status or candidate category to which each species has been assigned by USFWS.

For this report the following acronyms are used for federal special-status species:

- FE Federally listed as Endangered

- FT Federally listed as Threatened
- FPE Federally proposed for listing as Endangered
- FPT Federally proposed for listing as Threatened
- FC Federal Candidate Species

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC designates vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed taxa are not subject to specific, separate legal protections, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB only contains data regarding specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

- SE State-listed as Endangered
- ST State-listed as Threatened
- SR State-listed as Rare
- SC State Candidate for listing
- SFP State Fully Protected
- SSC State Species of Special Concern

California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* includes for each taxon a California Rare Plant Rank (CRPR), which is jointly determined by CNPS and CDFW. The CNPS Inventory focuses on geographic distribution and characterization of Rare, Threatened, or Endangered vascular plant species of California. The plant ranks, including extensions, are summarized in Table 3-1.

Table 3-1. CNPS Ranks 1, 2, 3, & 4 and Threat Code Extensions

CNPS Rank	Comments
Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California

CNPS Rank	Comments
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.
Rank 4 – Plants of Limited Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	**Comments**
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

3.3 Jurisdictional Water Resources

3.3.1 Army Corps of Engineers

Pursuant to Section 404 of the CWA, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

> *(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
> *(2) All interstate waters including interstate wetlands;*
> *(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
> > *(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*

(ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

(8) Waters of the United States do not include prior converted cropland.[2]

Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

> *...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions." In 1987 the Corps published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methods set forth in the 1987 Wetland Delineation Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the manual and Supplement provide great detail in methods and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

[2] The term “prior converted cropland” is defined in the Corps’ Regulatory Guidance Letter 90-7 (dated September 26, 1990) as “wetlands which were both manipulated (drained or otherwise physically altered to remove excess water from the land) and cropped before 23 December 1985, to the extent that they no longer exhibit important wetland values. Specifically, prior converted cropland is inundated for no more than 14 consecutive days during the growing season….” [Emphasis added.]

- more than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the National List of Plant Species that Occur in Wetlands[3]);
- soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the 1987 Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

On January 9, 2001 and June 5, 2007 the Supreme Court of the United States issued two rulings *Solid Waste Agency of Northern Cook County* v. *United States Army Corps of Engineers, et al* [SWANCC] and *Rapanos* v. *United States* and *Carabell* v. *United States Army Corps of Engineers* [Rapanos], respectively). The first case reiterated that "isolated" waters (those with no interstate commerce connection) are not subject to federal jurisdiction under Section 404 of the Clean Water Act. The second case determined (in a plurality vote) that a water must have a nexus with a "traditionally navigable water" (an undefined term) to be subject to federal jurisdiction under Section 404 of the Clean Water Act. The Corps and EPA has continued to grapple with providing clear guidance on these two decisions and continue to propose and/or issue guidance.

On June 29, 2015, the EPA and the Corps issued the Clean Water Rule in the *Federal Register*, Volume 80, No. 124, which defines the scope of waters of the United States protected under the CWA. The rule becomes effective on August 28, 2015 and is a definitional rule intended to clarify the scope of "waters of the Unites States". In this rule, waters of the Unites States would include the following categories of jurisdictional waters: (1) traditional navigable waters, (2) interstate waters, (3) territorial seas, (4) impoundments of jurisdictional waters, (5) tributary waters, (6) adjacent waters, and (7) regional features subject to a case-specific analysis to determine if a significant nexus exists, and (8) waters in the 100-year floodplain, or within 4,000 feet of a water of the United States, subject to a case-specific analysis, to determine if a significant nexus exists. Each of these features, as necessary, are described below.

Traditional Navigable Waters, Interstate Waters, Territorial Seas, Impoundments of Jurisdictional Waters: There is no change to the definitions of the first four types: traditional navigable waters, interstate waters, territorial seas, impoundments of jurisdictional waters.

Tributaries: The terms tributary and tributaries, as described in 33 CFR Part 328.3, each mean a water that contributes flow, either directly or through another water (including an impoundment identified in paragraph (a)(4) of this section), to a water identified in paragraphs (a)(1) through

[3] Lichvar, R. W. 2013. *The National Wetland Plant List:* 2013 wetland ratings. Phytoneuron 2013-49: 1-241.

(3) of this section that is characterized by the presence of the physical indicators of a bed and banks and an ordinary high water mark. These physical indicators demonstrate there is volume, frequency, and duration of flow sufficient to create a bed and banks and an ordinary high water mark, and thus to qualify as a tributary. A tributary can be a natural, man-altered, or man-made water and includes waters such as rivers, streams, canals, and ditches not excluded under paragraph (b) of this section. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if, for any length, there are one or more constructed breaks (such as bridges, culverts, pipes, or dams), or one or more natural breaks (such as wetlands along the run of a stream, debris piles, boulder fields, or a stream that flows underground) so long as a bed and banks and an ordinary high water mark can be identified upstream of the break. A water that otherwise qualifies as a tributary under this definition does not lose its status as a tributary if it contributes flow through a water of the United States that does not meet the definition of tributary or through a non-jurisdictional water to a water identified in paragraphs (a)(1) through (3) of this section.

Adjacent Waters: As described in 33 CFR, Part 328.3, the term adjacent means bordering, contiguous, or neighboring a water identified in paragraphs (a)(1) through (5) of this section, including waters separated by constructed dikes or barriers, natural river berms, beach dunes, and the like. For purposes of adjacency, an open water such as a pond or lake includes any wetlands within or abutting its ordinary high water mark. Adjacency is not limited to waters located laterally to a water identified in paragraphs (a)(1) through (5) of this section. Adjacent waters also include all waters that connect segments of a water identified in paragraphs (a)(1) through (5) or are located at the head of a water identified in paragraphs (a)(1) through (5) of this section and are bordering, contiguous, or neighboring such water. Waters being used for established normal farming, ranching, and silviculture activities (33 U.S.C. 1344(f)) are not adjacent.

Adjacent is based on whether the feature neighbors a traditional navigable water. *Neighboring* is defined in 33 CFR Part 328.3 as:

(i) All waters located within 100 feet of the ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section. The entire water is neighboring if a portion is located within 100 feet of the ordinary high water mark;

1.

(ii) All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (5) of this section and not more than 1,500 feet from the ordinary high water mark of such water. The entire water is neighboring if a portion is located within 1,500 feet of the ordinary high water mark and within the 100-year floodplain; and

(iii) All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or (a)(3) of this section, and all waters within 1,500 feet of the ordinary high water mark of the Great Lakes. The entire water is neighboring if a portion is located within 1,500 feet of the high tide line or within 1,500 feet of the ordinary high water mark of the Great Lakes.

Case-Specific Waters: The final rule creates *case-specific waters*, meaning they are not jurisdictional by rule but are subject to case-specific analysis to determine if a significant nexus exists and the water is a water of the United States. They are as follows:

- Prairie potholes
- Carolina and Delmarva bays
- Pocosins
- western vernal pools in California
- Texas coastal prairie wetlands.
- Waters within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas **and** waters within 4,000 feet of the high tide line or the ordinary high water mark of a traditional navigable water, interstate water, the territorial seas, impoundments, or covered tributary are subject to case-specific significant nexus determinations, unless the water is excluded under paragraph (b) of the rule.

Case-specific waters may be evaluated as ''similarly situated,'' but it must be first demonstrated that these waters function alike and are sufficiently close to function together in affecting downstream waters. The significant nexus analysis must then be conducted based on consideration of the functions provided by those waters in combination in the point of entry watershed.

The final rule keeps existing exclusions but now excludes by rule certain ditches from jurisdiction, including ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary, and ditches with intermittent flow that are not a relocated tributary, or excavated in a tributary, or drain wetlands. The final rule also excludes groundwater and erosional features as well as stormwater control features constructed to convey, treat, or store stormwater, and cooling ponds that are created in dry land.

SUMMARY
The agencies will assert jurisdiction over the following waters:

2. Traditional navigable waters
3. Interstate waters
4. Territorial seas
5. Impoundments of jurisdictional waters
6. Tributaries having bed and bank and ordinary high water mark
7. Adjacent waters neighboring traditional navigable waters, interstate waters, territorial seas, impoundments of jurisdictional waters, or tributaries with neighboring defined as follows: (1) Waters located in whole or in part within 100 feet of the ordinary high water mark of 1 thru 5 above; (2) Waters located in whole or in part in the 100-year floodplain and that are within 1,500 feet of the ordinary high water mark of 1 thru 5 above (floodplain waters); or (3) Waters located in whole or in part within 1,500 feet of the high tide line of 1 or 2 and waters located within 1,500 feet of the ordinary high water mark of the Great Lakes.

The agencies will decide jurisdiction over the following waters based on a case-specific analysis

to determine whether they have a significant nexus:

- Prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands; and
- Waters within the 100-year floodplain of a traditional navigable water, interstate water, or the territorial seas and waters within 4,000 feet of the high tide line or the ordinary high water mark of a traditional navigable water, interstate water, the territorial seas, impoundments, or covered tributary are subject to case-specific significant nexus determinations, unless the water is excluded under paragraph (b) of the rule.

The agencies generally will **not** assert jurisdiction over the following features:

- Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary
- Ditches with intermittent flow that are not a relocated tributary, or excavated in a tributary, or drain wetlands.
- Groundwater and erosional features as well as stormwater control features constructed to convey, treat, or store stormwater, and cooling ponds that are created in dry land.
- Prior converted cropland and waste treatment systems.

- Erosional features, including gullies, rills, and ephemeral features that do not have a bed and banks and ordinary high water mark.

The agencies will apply the significant nexus standard as follows:

- A significant nexus is present when waters ‘‘either alone or in combination with similarly situated [wet]lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as ‘navigable.’ ’’

3.3.2 Regional Water Quality Control Board

Section 401 of the CWA requires any applicant for a Section 404 permit to obtain certification from the State that the discharge (and the operation of the facility being constructed) will comply with the applicable effluent limitation and water quality standards. In California this 401 certification is obtained from the Regional Board. The Corps, by law, cannot issue a Section 404 permit until a 401 certification is issued or waived.

Subsequent to the SWANCC decision, the Chief Counsel for the State Water Resources Control Board issued a memorandum that addressed the effects of the SWANCC decision on the Section 401 Water Quality Certification Program.[4] The memorandum stating that for waters that are no longer considered subject to federal jurisdiction pursuant to Section 404 of the Clean Water Act, but which remain “waters of the state”, the State will continue to regulate discharges under the

[4] Wilson, Craig M. January 25, 2001. Memorandum addressed to State Board Members and Regional Board Executive Officers.

Porter-Cologne Act. In such cases the applicant must apply for and obtain a Waste Discharge Requirement from the Regional Board.

3.3.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a "stream" (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs."

CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and other wildlife. CDFW Legal Advisor has prepared the following opinion[5]:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects and riparian vegetation will be treated like natural waterways...

- Artificial waterways that have acquired the physical attributes of natural stream courses and which have been viewed by the community as natural stream courses, should be treated by [CDFW] as natural waterways...

- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions...

Thus, CDFW jurisdictional limits closely mirror those of the Corps. Exceptions are CDFW's addition of artificial stock ponds and irrigation ditches constructed on uplands, and the addition of riparian habitat supported by a river, stream, or lake regardless of the riparian area's federal wetland status.

4.0 RESULTS

This section provides the results of the general biological survey, vegetation mapping, habitat assessments for special-status species, and a jurisdictional waters and wetlands evaluation for Waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

[5] California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.

4.1 Existing Conditions

The Project is composed of open lands used for dairy farming (including feeding and spreading grounds), crops, equestrian (corrals), trucking yard(s), abandoned farm lands, and the Cucamonga Creek Flood Control Channel (along the east boundary). A few single-family rural residential homes occur along East Riverside Drive, South Ontario Avenue, and Chino Avenue. Soil surfaces reflect past and ongoing manipulation to support past and present agricultural uses. Manure is present throughout much of the Specific Plan Area. A dense layer of exotic grasses generally cover the pasturelands and manure spreading areas. Cattle feeding areas consist of mostly barren ground covered in manure. The Non-CVRC Project site is like that of the Specific Plan Area, but without active dairy farming.

Ground topography on the Non-CVRC Project site is shallow and the slope is slight, with the southernmost portion of the Non-CVRC Project site at about 750 feet and the northernmost portion at about 775 feet elevation. Soils are mapped as Delhi Fine Sand and Hilmar Loamy Fine Sand [Exhibit 4 - Soils] by the Natural Resource Conservation Service (NRCS).

No natural or semi-natural vegetation communities are present and vegetation on the Non-CVRC Project site included various non-native grasses and weedy species, such as Spanish brome (*Bromus madritensis*), ripgut brome (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), Mediterranean schismus (*Schismus barbatus*), barley (*Hordeum* sp.), filarees (*Erodium* spp.), Lamb's quarter's (*Chenopodium album*), pigweed (*Chenopodium* sp.), blessed milk thistle (*Silybum marianum*), prickly Russian-thistle (*Salsola tragus*), puncture vine (*Tribulus terrestris*), black mustard (*Brassica nigra*), cheeseweed (*Malva parviflora*), giant reed (*Arundo donax*), and dwarf nettle (*Urtica urens*). Overall non-native vegetative cover is about 95-100 percent in the pastureland/spreading areas. There are mature trees lining portions of South Ontario Avenue including gum tree (*Eucalyptu*s sp.), pine (*Pinus* sp.), Mexican fan palm (*Washingtonia robusta*), and Peruvian peppertree (*Schinus molle*); some have been trimmed to a height below existing power lines

The Non-CVRC Project site adjacent to the Cucamonga Creek Flood Control Channel, a potential federal and state jurisdictional water resource that is fully concrete-lined and supports no vegetation in the vicinity of the Non-CVRC Project site or Specific Plan Area.

There are no natural, surface drainage or ponding features (including vernal pools or swales) on the Non-CVRC Project site and there was no indication (e.g. deep-rooted perennial wetland vegetation) of a perched or seasonally high water table.

The Non-CVRC Project site lacks land features (e.g. a vegetated drainage) that would potentially support wildlife migration or large-scale nursery habitat, such as a heron rookery or salmon spawning grounds. Lands surrounding the Non-CVRC Project site consist of active agriculture and high-density residential development. The Cucamonga Creek Flood Control Channel, adjacent and to the east, would not support valuable, if any animal movement. The entire channel is concrete and the channel walls are vertical at 90-degree angles to the channel and over 8 feet tall. Any animal within the channel would not be able to move out of the channel.

Wildlife detected on the Non-CVRC Project site was limited to species highly adaptable to man-made landscapes. The most abundant group of species were birds and of the birds present, non-native Eurasian collared-dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), and European starling (*Sturnus vulgaris*) were most common. Other detected species were the common crow (*Corvus brachyrhynchos*), house finch (*Haemorhous mexicanus*), and Botta's pocket gopher (*Thomomys bottae*). California ground squirrel (*Spermophilus beecheyi*) was also detected on the Non-CVRC Project site. There are several mature non-native trees along South Ontario Avenue that could support raptor nesting.

Natural and semi-natural vegetation are absent. The vegetation mapping [Exhibit 5 – Vegetation map] mapped two land-use types potentially relevant to evaluation of natural resource values: Agricultural and Developed/Disturbed (includes bare ground).

Table 4-1 summarizes the types of vegetation present on the Non-CVRC Project site. The majority of the Non-CVRC Project site is agriculture (active and inactive) [Exhibit 5 – Vegetation Map]. These lands were nearly devoid of native plant species. Those native plant species present are "ruderal/weedy" in habitat, in that they commonly occur in highly disturbed conditions.

Table 4-1. Summary of Vegetation on the Non-CVRC Project Site

Vegetation Type	Acreage
Agricultural	49.7
Developed/Disturbed	11.0
Total	**60.8**

Several residences (mapped as developed/disturbed) are present on the Non-CVRC Project site, along with dirt and paved roads.

4.2 Special-Status Vegetation Communities

A search of the CNDDB (CDFW 2015a) revealed records for 10 special-status natural communities in the Guasti, California, USGS 7.5-minute quadrangle map area and eight surrounding quadrangle map areas: California Walnut Woodland, Riversidian Alluvial Fan Sage Scrub, Southern California Arroyo Chub / Santa Ana Sucker Stream, Canyon Live Oak Ravine Forest, Coastal and Valley Freshwater Marsh, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Southern Willow Scrub. Each of these was specifically determined to be absent from the Non-CVRC Project site (and the entire Specific Plan area) based on fieldwork conducted by a qualified biologist. The Non-CVRC Project site does not support any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Thus, no impact to these resources would occur from development of the Non-CVRC Project site.

4.3 Special-Status Plants

No special-status plants were detected at the Non-CVRC Project site. Table 4-2 provides a list of special-status plants evaluated for the Non-CVRC Project site. Species were evaluated based on the following factors: 1) species identified by the CNDDB and CNPS as occurring (either

currently or historically) on or in the vicinity of the Non-CVRC Project site, and 2) any other special-status plants that are known to occur within the vicinity of the Non-CVRC Project site, or for which potentially suitable habitat occurs within the site.

Table 4-2. Special-Status Plants Evaluated for the Non-CVRC Project site

Species Name	Status	Habitat Requirements	Occurrence
Alpine sulphur-flowered buckwheat *Eriogonum umbellatum* var. *minus*	Federal: None State: None CNPS: 4.3	Gravelly soils in subalpine coniferous forest and upper montane coniferous forest.	Absent
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CNPS: 1B.1	Coastal dunes and coastal sage scrub.	Absent
California muhly *Muhlenbergia californica*	Federal: None State: None CNPS: 4.3	Mesic habitats, including seeps and streambanks, in chaparral, coastal scrub, lower montane coniferous forest, and meadows.	Absent
California saw-grass *Cladium californicum*	Federal: None State: None CNPS: 2B.2	Meadows and seeps, and alkaline or freshwater marshes and swamps.	Absent
Catalina mariposa-lily *Calochortus catalinae*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland, coastal sage scrub, valley and foothill grassland.	Absent
Chaparral ragwort *Senecio aphanactis*	Federal: None State: None CNPS: 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Absent
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: 1B.1	Sandy soils in chaparral, coastal sage scrub.	Absent
Chickweed oxytheca *Sidotheca caryophylloides*	Federal: None State: None CNPS: 4.3	Sandy soils in lower montane coniferous forest.	Absent
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Absent
Coulter's matilija poppy *Romneya coulteri*	Federal: None State: None CNPS: 4.2	Often in burns in chaparral and coastal scrub.	Absent
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CNPS: 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Absent
Crested milk-vetch *Astragalus bicristatus*	Federal: None State: None CNPS: 4.3	Sandy or rocky soils (mostly carbonate) in lower and upper montane coniferous forests.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Duran's rush *Juncus duranii*	Federal: None State: None CNPS: 4.3	Mesic soils in lower and upper montane coniferous forests, meadows and seeps.	Absent
Fragrant pitcher sage *Lepechinia fragrans*	Federal: None State: None CNPS: 4.2	Chaparral.	Absent
Greata's aster *Symphyotrichum greatae*	Federal: None State: None CNPS: 1B.3	Mesic soils in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland.	Absent
Hall's monardella *Monardella macrantha* ssp. *hallii*	Federal: None State: None CNPS: 1B.3	Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland.	Absent
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: 1B.2	Perennial bulb found in rocky, calcareous soils in chaparral, coastal scrub, and valley and foothill grassland.	Absent
Johnston's bedstraw *Galium johnstonii*	Federal: None State: None CNPS: 4.3	Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland.	Absent
Johnston's buckwheat *Eriogonum microthecum* var. *johnstonii*	Federal: None State: None CNPS: 1B.3	Rocky soils in subalpine coniferous forest and upper montane coniferous forest.	Absent
Jokerst's monardella *Monardella australis* ssp. *jokerstii*	Federal: None State: None CNPS: 1B.1	Steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes. Chaparral, lower montane coniferous forest.	Absent
Laguna Moutains jewelflower *Streptanthus bernardinus*	Federal: None State: None CNPS: 4.3	Chaparral and lower montane coniferous forest.	Absent
Lemon lily *Lilium parryi*	Federal: None State: None CNPS: 1B.2	Mesic soils in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest.	Absent
Lewis' evening-primrose *Camissoniopsis lewisii*	Federal: None State: None CNPS: 3	Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Lucky morning-glory *Calystegia felix*	Federal: None State: None CNPS: 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Absent
Marsh sandwort *Arenaria paludicola*	Federal: FE State: SE CNPS: 1B.1	Bogs and fens, freshwater marshes and swamps.	Absent
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Absent
Mesa horkelia *Horkelia cuneata* var. *puberula*	Federal: None State: None CNPS: 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Absent
Mojave phacelia *Phacelia mohavensis*	Federal: None State: None CNPS: 4.3	Sandy or gravelly soils in cismontane woodland, lower montane coniferous forests, meadows and seeps, pinyon and juniper woodland.	Absent
Nevin's barberry *Berberis nevinii*	Federal: FE State: SE CNPS: 1B.1	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Absent
Northern limestone buckwheat *Eriogonum microthecum* var. *alpinum*	Federal: None State: None CNPS: 4.3	Sometimes rocky or gravelly soils in alpine dwarf scrub and Great Basin scrub.	Absent
Ocellated Humboldt lily *Lilium humboldtii* ssp. *ocellatum*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, riparian woodland. Occurring in openings.	Absent
Paniculate tarplant *Deinandra paniculata*	Federal: None State: None CNPS: 4.2	Usually in vernally mesic, sometimes sandy soils in coastal scrub, valley and foothill grassland, and vernal pools.	Absent
Parish's desert-thorn *Lycium parishii*	Federal: None State: None CNPS: 2B.3	Coastal sage scrub, Sonoran desert scrub	Absent
Parish's oxytheca *Acanthoscyphus parishii* var. *parishii*	Federal: None State: None CNPS: 4.2	Sandy or gravelly soils in chaparral and lower montane coniferous forest.	Absent
Parry’s spineflower *Chorizanthe parryi* var. *parryi*	Federal: None State: None CNPS: 1B.1	Annual herb found in sandy or rocky openings in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland.	Absent
Peirson's spring beauty *Claytonia lanceolata* var. *peirsonii*	Federal: None State: None CNPS: 3.1	In scree within subalpine and upper montane coniferous forest.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Peninsular spineflower *Chorizanthe leptotheca*	Federal: None State: None CNPS: 4.2	Alluvial fan, granitic. Chaparral, coastal scrub, lower montane coniferous forest.	Absent
Pine fritillary *Fritillaria pinetorum*	Federal: None State: None CNPS: 4.3	Granitic or metamorphic soils in chaparral, lower and upper montane coniferous forests, pinyon and juniper woodland, and subalpine coniferous forest.	Absent
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Absent
Prairie wedge grass *Sphenopholis obtusata*	Federal: None State: None CNPS: 2B.2	Mesic soils in cismontane woodland, meadows and seeps.	Absent
Pringle's monardella *Mondardella pringlei*	Federal: None State: None CNPS: 1A	Sandy soils in coastal sage scrub.	Absent
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CNPS: 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Absent
Rigid fringepod *Thysanocarpus rigidus*	Federal: None State: None CNPS: 1B.2	Dry rocky slopes in pinyon and juniper woodland.	Absent
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: 4.3	Chaparral, coastal sage scrub.	Absent
Rock Creek broomrape *Orobanche valida* ssp. *valida*	Federal: None State: None CNPS: 1B.2	Granitic soils in chaparral, pinyon and juniper woodland.	Absent
Rock monardella *Monardella saxicola*	Federal: None State: None CNPS: 4.2	Rocky, usually serpentinite soils in closed-cone coniferous forest, chaparral, and lower montane coniferous forest.	Absent
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Federal: FE State: SE CNPS: 1B.2	Coastal dune, coastal salt marshes and swamps.	Absent
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Absent
San Antonio Canyon bedstraw *Galium angustifolium* ssp. *gabrielense*	Federal: None State: None CNPS: 4.3	Granitic, sandy, or rocky soils in chaparral and lower montane coniferous forests.	Absent

Species Name	Status	Habitat Requirements	Occurrence
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Absent
San Diego ambrosia *Ambrosia pumila*	Federal: FE State: None CNPS: 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Absent
Sanford's arrowhead *Sagittaria sanfordii*	Federal: None State: None CNPS: 1B.2	Marshes and swamps (shallow freshwater).	Absent
San Gabriel linanthus *Linanthus concinnus*	Federal: None State: None CNPS: 1B.2	Rocky soils and openings in chaparral, lower and upper montane coniferous forests.	Absent
San Gabriel manzanita *Arctostaphylos glandulosa* ssp. *gabrielensis*	Federal: None State: None CNPS: 1B.2	Chaparral (rocky).	Absent
San Gabriel oak *Quercus durata* var. *gabrielensis*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland.	Absent
San Gabriel ragwort *Senecio astephanus*	Federal: None State: None CNPS: 4.3	Rocky slopes, coastal bluff scrub, chaparral.	Absent
Santa Ana River woolly star *Eriastrum densifolium* ssp. *sanctorum*	Federal: FE State: SE CNPS: 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Absent
Short-joint beavertail *Opuntia basilaris* var. *brachyclada*	Federal: None State: None CNPS: 1B.2	Chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Absent
Singlewhorl burrobrush *Ambrosia monogyra*	Federal: None State: None CNPS: 2B.2	Sandy soils in chaparral and Sonoran desert scrub.	Absent
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: 1B.1	Sandy soils in alluvial scrub, chaparral, and cismontane woodland.	Absent
Slender mariposa lily *Calochortus clavatus* var. *gracilis*	Federal: None State: None CNPS: 1B.2	Chaparral and coastal sage scrub.	Absent
Small-flowered morning-glory *Convolvulus simulans*	Federal: None State: None CNPS: 4.2	Chaparral (openings), coastal sage scrub, valley and foothill grassland. Occurring on clay soils and serpentinite seeps.	Absent
Smooth tarplant *Centromadia pungens* ssp. *laevis*	Federal: None State: None CNPS: 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Absent

Species Name	Status	Habitat Requirements	Occurrence
Southern California black walnut *Juglans californica*	Federal: None State: None CNPS: 4.2	Chaparral, cismontane woodland, coastal sage scrub, alluvial surfaces.	Absent
Southern Sierra woolly sunflower *Eriophyllum lanatum* var. *obovatum*	Federal: None State: None CNPS: 4.3	Sandy loam in lower and upper montane coniferous forest.	Absent
Urn-flowered alumroot *Heuchera caespitosa*	Federal: None State: None CNPS: 4.3	Rocky soils in cismontane woodland, riparian forest (montane), lower and upper montane coniferous forest.	Absent
Vanishing wild buckwheat *Eriogonum evanidum*	Federal: None State: None CNPS: 1B.1	Annual herb found in sandy and/or gravelly soils within chaparral, cismontane woodland, lower montane coniferous forest, and pinyon and juniper woodland at an elevation range of 3600 ad 7200 feet.	Absent
Watson's amaranth *Amaranthus watsonii*	Federal: None State: None CNPS: 4.3	Mojavean desert scrub, Sonoran desert scrub.	Absent
Western spleenwort *Asplenium vespertinum*	Federal: None State: None CNPS: 4.2	Rocky soils in chaparral, cismontane woodland, and coastal scrub.	Absent
White-bracted spineflower *Chorizanthe xanti* var. *leucotheca*	Federal: None State: None CNPS: 1B.2	Sandy or gravelly soils in Mojavean desert scrub and pinyon and juniper woodland.	Absent
White rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CNPS: 2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Absent
Woolly mountain-parsley *Oreonana vestita*	Federal: None State: None CNPS: 1B.3	Gravel or talus in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest.	Absent

STATUS

Federal
FE – Federally Endangered

State
SE – State Endangered

CNPS
Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 – Plants about which more information is needed (a review list).
Rank 4 – Plants of limited distribution (a watch list).

Species Name	Status	Habitat Requirements	Occurrence
Threat Code extension .1 – Seriously endangered in California (over 80% occurrences threatened) .2 – Fairly endangered in California (20-80% occurrences threatened) .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known) **Occurrence** **Absent** – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.			

4.3.1 Special-Status Plants Detected at the Project Site

No special-status plants were detected at the Non-CVRC Project site and none are expected to be present.

4.4 Special-Status Animals

No special-status animals were detected at the Non-CVRC Project site. Table 4-3 provides a list of special-status animals evaluated for the Non-CVRC Project site through the general biological survey and habitat assessments. Species were evaluated based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in the vicinity of the Non-CVRC Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Non-CVRC Project site, for which potentially suitable habitat occurs on the site.

Table 4-3. Special-Status Animals Evaluated for the Non-CVRC Project site

Species Name	Status	Habitat Requirements	Occurrence
Invertebrates			
Delhi-sands flower-loving fly *Raphiomidas terminatus abdominalis*	Federal: FE State: None	Fine, sandy soils, often associated with wholly or partially consolidated dunes referred to as the "Delhi" series. Vegetation consists of a sparse cover, including California buckwheat, California croton, deerweed, and evening primrose.	None
Fish			
Arroyo chub *Gila orcutti*	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	None
Santa Ana speckled dace	Federal: None	Occurs in the headwaters of	None

Rhinichthys osculus ssp. 3	State: SSC	the Santa Ana and San Gabriel Rivers. Usually inhabits shallow cobble and gravel riffles.	
Santa Ana sucker *Catostomus santaanae*	Federal: None State: SSC	Small, shallow streams, with currents ranging from swift in the canyons to sluggish in the bottom lands.	None
Amphibians			
Arroyo toad *Anaxyrus californicus*	Federal: FE State: SSC	Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats.	None
California red-legged frog *Rana draytonii*	Federal: FT State: SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation.	None
Coast range newt *Taricha torosa*	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	None
Northern leopard frog *Lithobates pipiens*	Federal: None State: SSC	Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, reservoirs.	None
Southern mountain yellow-legged frog *Rana muscosa*	Federal: FE State: SE, SSC	Streams and small pools in ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.	None
Western spadefoot *Spea hammondii*	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	None
Reptiles			
California mountain kingsnake (San Bernardino population) *Lampropeltis zonata (parvirubra)*	Federal: None State: SSC	Bigcone spruce and chaparral at lower elevations. Black oak, incense cedar, Jeffery pine, and ponderosa pine at higher elevations.	None
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian	None

		woodlands.	
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	None
Orange throat whiptail *Aspidoscelis hyperythra*	Federal: None State: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	None
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	None
Silvery legless lizard *Anniella pulchra pulchra*	Federal: None State: SSC	Occurs primarily in areas with sandy or loose organic soil, or where there is plenty of leaf litter. Associated with coastal sage scrub, chaparral, coastal dunes, valley/foothill grasslands, oak woodlands, and pine forests.	None
South coast garter snake *Thamnophis sirtalis ssp.*	Federal: None State: SSC	Utilizes a wide variety of habitats- forests, mixed woodlands, grassland, chaparral, farmlands, often near ponds, marshes, or streams.	None
Two-striped garter snake *Thamnophis hammondii*	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	None
Western pond turtle *Emys marmorata*	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons.	None
Birds			
American peregrine falcon (nesting) *Falco peregrinus anatum*	Federal: Delisted State: Delisted, SFP	Although part of its historic breeding range, this species does not breed in southern California. In the west, breeding habitat consists of high cliffs along the coast.	None
Bald eagle (nesting & wintering) *Haliaeetus leucocephalus*	Federal: BGEPA State: SE, SFP	Primarily in or near seacoasts, rivers, swamps, and large	None

		lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	Federal: None State: SE	Coastal salt marshes.	None
Black swift (nesting) *Cypseloides niger*	Federal: None State: SSC	Nests in forested areas near rivers in dark, damp areas. Forages in skies over mountainous areas and on coastal cliffs.	None
Burrowing owl *Athene cunicularia*	Federal: None State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Potential to occur.
California black rail *Laterallus jamaicensis coturniculus*	Federal: None State: ST, SFP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	None
California spotted owl *Strix occidentalis occidentalis*	Federal: None State: SSC	Prefers mature forests. Can utilize rocky canyons.	None
Clark's marsh wren *Cistothorus palustris clarkae*	Federal: None State: SSC	Freshwater and brackish marshes dominated by bulrushes or cattails.	None
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	Federal: None State: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	None
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	None
Golden eagle (nesting & wintering) *Aquila chrysaetos*	Federal: BGEPA State: SFP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	None
Grasshopper sparrow (nesting) *Ammodramus savannarum*	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	None
Least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including	None

		southern willow scrub, mule fat scrub, and riparian forest.	
Lesser sandhill crane (wintering) *Grus canadensis canadensis*	Federal: None State: SSC	Pastures, moist grassland, alfalfa fields, and shallow wetlands. Roosts in wetland habitats, including rain-pooled agricultural fields, shallow freshwater lakes and ponds, alkaline lakes, and channels of shallow rivers.	None
Loggerhead shrike (nesting) *Lanius ludovicianus*	Federal: None State: SSC	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Potential to occur as migrant and winter visitor (foraging role). No potential for nesting.
Long-eared owl (nesting) *Asio otus*	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	None
Mountain plover (wintering) *Charadrius montanus*	Federal: None State: SSC	Does not nest in California. Occurs within the state only during the wintering season. Largest numbers winter among grasslands and agricultural areas within the interior areas of the state.	None
Northern harrier (nesting) *Circus cyaneus*	Federal: None State: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	None
Olive-sided flycatcher (nesting) *Contopus cooperi*	Federal: None State: SSC	Breeds in montane and northern coniferous forests, at forest edges and openings, such as meadows and ponds. Winters at forest edges and clearings where tall trees or snags are present.	None
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	None
Swainson's hawk (nesting)	Federal: None	Summer in wide open spaces	None

Buteo swainsoni	State: ST	of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: None State: SE	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	None
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE	Dense, wide riparian woodlands with well-developed understories.	None
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: SFP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Potential to occur in a foraging role. No potential for nesting.
Willow flycatcher (nesting) *Empidonaz traillii*	Federal: None State: SE	Breeds in moist, shrubby areas, often with standing or running water. Winters in shrubby clearings and early successional growth.	None
Yellow-breasted chat (nesting) *Icteria virens*	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	None
Yellow-headed blackbird (nesting) *Xanthocephalus xanthocephalus*	Federal: None State: SSC	Breed and roost in freshwater wetlands with dense, emergent vegetation such as cattails. Often forage in fields, typically wintering in large, open agricultural areas.	None
Yellow rail *Coturnicops noveboracensis*	Federal: None State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	None
Yellow warbler (nesting) *Setophaga petechia*	Federal: None State: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest,	None

		and shrub habitats.	
Mammals			
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: SSC	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavities.	Low potential for foraging above the Non-CVRC Project site.
Desert bighorn sheep *Ovis canadensis nelsoni*	Federal: None State: SFP	Visually open foraging areas of grass near steep, rocky areas.	None
Los Angeles pocket mouse *Perognathus longimembris brevinasus*	Federal: None State: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	None
Mohave river vole *Microtus californicus mohavensis*	Federal: None State: SSC	Moist habitats including meadows, freshwater marshes and irrigated pastures in the vicinity of the Mojave River.	None
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	None
Pacific pocket mouse *Perognathus longimembris pacificus*	Federal: FE State: SSC	Fine, alluvial soils along the coastal plain. Scarcely in rocky soils of scrub habitats.	None
Pallid bat *Antrozous pallidus*	Federal: None State: SSC	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	None
Pallid San Diego pocket mouse *Chaetodipus fallax pallidus*	Federal: None State: SSC	In desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodland. Sandy herbaceous areas, usually in association with rocks or coarse gravel.	None
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	None
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: SSC	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	None

San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats including low density sage scrub.	None. No native vegetation present on or adjacent to the site.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	None
Stephens' kangaroo rat *Dipodomys stephensi*	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	None
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Low potential for foraging above the Non-CVRC Project site.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Low potential to occur – roost in fan palms and forage above the site at night.

STATUS

Federal
FE – Federally Endangered
FT – Federally Threatened
BGEPA – Bald and Golden Eagle Protection Act

State
SE – State Endangered
ST – State Threatened
SFP – California Fully-Protected Species
SSC – Species of Special Concern

4.4.1 Special-Status Wildlife Species not Observed but with a Potential to Occur at the Project Site

Delhi Sands Flower-loving Fly (DSFF). Absent. The Non-CVRC Project site has the soils characteristically associated with DSFF and occurs within the historical range of the species. Although a focused habitat evaluation was not performed on the Non-CVRC Project site portion of the Specific Plan Area, Ecological Sciences, Inc. did perform a detailed habitat suitability evaluation as to the potential of DSFF to occur on the portion of the Specific Plan Area controlled by CVRC (Ecological Sciences, Inc. 2015). The field analysis was performed in February 2015.

The Non-CVRC Project site has the same levels and types of disturbances to its lands as does the CVRC-controlled lands. Based on results of the February 2015 habitat suitability evaluation performed on the CVRC-controlled lands, existing conditions are not consistent with those known or expected to support DSFF. Specifically Ecological Sciences, Inc. (2015) indicated the following:

"*No exposed natural or semi-natural open areas with unconsolidated wind-worked granitic soils or dunes are present. Exposure to extensive substrate disturbances (e.g. abandoned dairy) has substantial negative effects on potential DSFF habitat and prevents potentially suitable DSFF microhabitat conditions from developing. Substrate conditions are not consistent with those most often correlated with potential DSFF habitat and no DSFF plant associations are present on site.*

In view of the site's highly degraded and isolated condition, exposure to significant surface disturbances, and analyses of correlative habitat information from a wide range (e.g., relatively disturbed to more natural habitats) of occupied DSFF habitats in the region, the lands do not contain habitat suitable to support or sustain a viable DSFF population."

Although analysis of Non-CVRC Project site lands was not performed at the same level as was done for the CV lands, GLA performed a visual analysis from the perimeter and via satellite imagery. The off-site improvement lands have the same types and level of disturbances as do the CVRC lands. Consequently, the Non-CVRC Project site lands are considered unsuitable for DSFF.

Burrowing Owl. Potential. Potential habitat for this species is present on the Non-CVRC Project site. Access to Non-CVRC Project site lands was not available and hence a focused survey was not performed. No sign or detection of burrowing owl was made during the field visit.

White-tailed Kite. Potential to occur. This species hunts in open lands vegetated with grasses and low-growing shrubs. Although the Non-CVRC Project site has mature trees, this species has no potential to nest, as it requires low trees and/or large shrubs with little disturbance. This species has potential to occur during the fall and spring months as a migrant and may forage on the Non-CVRC Project site over winter.

Loggerhead Shrike. Potential to occur. This is a formerly common resident and occasional migrant in open natural areas throughout cismontane (coastal rather than desert) southern California. For breeding, requires areas with high productivity of large invertebrate and small vertebrate prey, along with low levels of predation for adults and young (e.g., from crows, ravens, hawks, and domestic pets). The resident populations have slowly declined for decades and appear to be on the verge of extirpation, though small numbers still breed in relatively pristine, undisturbed grasslands and savannahs. Populations occurring in the region from the north, as migrants and winter visitors, have also declined substantially but at this point are somewhat more numerous than the resident birds. Thus, migrant or winter visitors may visit the Non-CVRC Project site on rare occasions, as it is relatively open.

Western Mastiff Bat & Big Free-tailed Bat. Potential to occur. Forages over a wide variety of natural communities and occasionally over manmade areas. The Non-CVRC Project site is potentially suitable for foraging, given the broad array of conditions utilized by the species, but does not show potential to be especially valuable or productive for the species. The species nests and roosts in crevices in tall, generally vertical surfaces and requires very low levels of disturbance (e.g. noise, night lighting, human or other activity) in the site vicinity. Evidence indicates low but reasonable potential for occasional foraging, but no reasonable potential for roosting or nesting, by the species at the Non-CVRC Project site.

Western Yellow Bat. Potential to occur. This is primarily a desert species, historically foraging, roosting and nesting in desert wetlands, especially native fan palm oases. It has substantially declined in this role due to disturbance and degradation of desert wetlands. However, it has also apparently expanded its range into other areas in recent decades, apparently as an adaptation to increasing ornamental plantings in the southwest and southern California of non-native fan palms. The species was unrecorded in cismontane (coastal rather than desert) California prior to about 1969, with noteworthy increases since then (Constantine 1998). The Non-CVRC Project site supports a few fan palms and only marginal potential foraging habitat. Thus potential for occurrence of a few individuals is low but reasonable.

4.4.2 Critical Habitat

Federal designated or proposed Critical Habitat is absent from the Non-CVRC Project site and adjacent lands.

4.5 Raptor Use

The Non-CVRC Project site provides foraging habitat for regionally common species of raptors such as red-tailed hawk (*Buteo jamaicensis*) and American kestrel (*Falco sparverius*). There is potential for white-tailed kite, a state Species of Special Concern, to occur in a foraging role during migration or winter.

The Non-CVRC Project site provides potential nesting habitat for common species of raptors. No nests were detected during the field work but there are mature trees having the necessary structure to support nesting. Refer to Exhibit 5,Vegetation Mapping, for the location of potential raptor nesting habitat.

4.6 Native Nesting Birds

The Non-CVRC Project site contains vegetation, open land, and structures that potentially provide suitable nesting sites for species legally protected as migratory birds. Specifically, direct impacts to native nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) [6] and

[6] The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

California Fish and Game Code. Nesting by non-native bird species is not protected and the Non-CVRC Project site is used regularly by several non-native species including European starling, rock dove, and Eurasian collared-dove.

No special-status species of birds are expected to nest on the Non-CVRC Project site.

4.7 Soil Mapping

The NRCS identifies the following soil types (series) as occurring (currently or historically) within the Non-CVRC Project site [Exhibit 4 – Soils Map]: Delhi Fine Sand and Hilmar Loamy Fine Sand. Based on a perimeter-only view of the Non-CVRC Project site, existing soils appeared to agree with the NRCS mapping, however at least some of the lands showed signs of deep soil amendment through introduction of manure.

4.8 Jurisdictional Water Resources

Based on GLA's limited access to the Non-CVRC Project site, a review of the area indicates that the site lacks water resources under the jurisdiction of the Corps, CDFW, or the Regional Board, other than the Cucamonga Creek Flood Control Channel.

4.9 Wildlife Migration/Nurseries

Wildlife corridors provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired.

The Non-CVRC Project site lacks land features (e.g. a drainage) that would potentially support wildlife migration or large-scale nursery habitat, such as a heron rookery or salmon spawning grounds. Lands surrounding the Non-CVRC Project site consist of active agriculture and high-density residential development. The Cucamonga Creek Flood Control Channel, adjacent to the east boundary of the Non-CVRC Project site, is not expected to support valuable, if any animal movement. The entire channel is concrete and the channel walls are vertical at 90-degree angles to the channel and over 8 feet tall. Any animal within the channel would not be able to move out of the channel.

5.0 IMPACT ANALYSIS

The following discussion examines the potential impacts to biological resources that would occur as a result of development of the Non-CVRC Project site. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or

animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other off-site areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

5.1 California Environmental Quality Act (CEQA)

5.1.1 Thresholds of Significance

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."*

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the

effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

> *"The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species,..."*

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

5.1.2 Criteria for Determining Significance Pursuant to CEQA

Appendix G of the 1998 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

> *a) 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 Game or U.S. Fish and Wildlife Service.*
>
> *b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*
>
> *c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
>
> *d) 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.*
>
> *e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
>
> *f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

5.2 Impacts to Native Vegetation

No native vegetation communities are present. No impact to native vegetation communities would occur.

5.3 Impacts to Special-Status Plants

No special-status plants are documented, or have potential to occur, on the Non-CVRC Project site. No impacts to special-status plants would occur.

5.4 Impacts to Special-Status Animals

Several special-status species have potential to occur on the Non-CVRC Project site. These species are: white-tailed kite, burrowing owl, loggerhead shrike, western mastiff bat, big free-tailed bat, and western yellow bat. Discussion is provided below for the potential impacts to these species that may occur from development of the Non-CVRC Project site. There is no potential for any federal or state listed animals to occur on the Non-CVRC Project site or to be impacted by development of the Non-CVRC Project site.

Raptors. Raptors (Birds of Prey) include owls, hawks, eagles, and falcons. Common species of raptors (e.g. red-tailed hawk, American kestrel, barn owl) as well as white-tailed kite (state Species of Special Concern) have the potential to forage on the Non-CVRC Project site. Development of the Non-CVRC Project site would remove an estimated 49.7 acres of potential foraging habitat (active and inactive agriculture). The Non-CVRC Project site also supports potential nesting habitat in the form of a few mature trees [refer to Exhibit 5]. Development of the Non-CVRC Project site would remove the potential raptor nesting habitat within its boundary and the 49.7 acres of potential foraging habitat. The loss of 49.7 acres of potential foraging habitat would not pose a significant impact to raptors under CEQA because the Non-CVRC Project site has been severely disturbed from past and current agriculture for many years, affecting the prey base present. The Non-CVRC Project site appears to have been managed to dissuade occupation by small mammals and because of the high level of ongoing land disturbance, reptile populations are expected to be very low. The ability of land to support raptor foraging is directly connected to its ability to support raptor prey – small mammals and reptiles.

Burrowing Owl. The Non-CVRC Project site provides potential burrowing owl habitat. If burrowing owl is present and impacted by development of the Non-CVRC Project site, it would be a significant impact under CEQA. However, with implementation of the measures presented in Section 6.1 (Burrowing Owl), no direct impacts to burrowing owl would occur.

Loggerhead Shrike. The Non-CVRC Project site has potential to provide foraging habitat for loggerhead shrike. This species has the potential to occur occasionally on the Non-CVRC Project site during migration and winter months. The species is not expected to nest on the site due to the lack of potential nesting habitat.

Development of the Non-CVRC Project site would remove 49.7 acres of potential foraging habitat (agriculture) that may be occasionally used by loggerhead shrike across years. The Non-CVRC Project site does not provide valuable habitat for the species and the number of individuals potentially affected is expected to be few. The removal of potential foraging habitat for this species through development of the Non-CVRC Project site would not be a significant impact under CEQA.

Special-status Bats. Three species of bats, western mastiff bat, big free-tailed bat, and western yellow bat have potential to occur on the Non-CVRC Project site. These species are state Species of Special Concern and they have a low potential to occur in a foraging role (above the Non-CVRC Project site). These species forage on insects while in flight. Development of the Non-CVRC Project site may reduce available foraging habitat for these three bat species, although the quality of the potential habitat does not appear to be of much value given the limited number of flying insects detected during site visits. The number of individuals potentially affected is judged to be few given the degraded nature of the potential habitat on the Non-CVRC Project site. There may be several western yellow bats roosting in the ornamental fan palms on the Non-CVRC Project site. This species is classified as a solitary bat, in that it does not form large roosts, but instead roosts singly or with a few other individuals. The number of western yellow bats potentially roosting in the fan palms is expected to be less than 10. Although this species has been given special status, its population has increased in Southern California due to the increase in plantings of ornamental fan palms. Potential impacts to these three species of bats would be less than significant under CEQA given the limited number of individuals potentially impacted.

5.5 Impacts to Critical Habitat

Development of the Non-CVRC Project site will not impact lands federally designated as Critical Habitat because none are mapped on or adjacent to the Non-CVRC Project site. *No impact.*

5.6 Impacts to Native Nesting Birds

Development of the Non-CVRC Project site has the potential to impact active native bird nests if vegetation is removed during the nesting season (January 1 to August 31). Impacts to nesting native birds are prohibited by the MBTA and California Fish and Game Code. A project-specific mitigation measure is identified in Section 6.2 of this report to avoid impacts to native nesting birds. Based in part upon the prohibition of removal of active bird nests and due to the limited habitat value of the Non-CVRC Project site for such birds, impacts to native birds by development of the Non-CVRC Project site would not be a significant impact under CEQA. The native birds with potential to nest on the Non-CVRC Project site would be those that are extremely common to the region and highly adapted to human landscapes, such as Anna's hummingbird and the house finch. The number of individuals potentially affected by development of the Non-CVRC Project site would not significantly affect regional or local, populations of such species.

5.7 Wildlife Migration/Nurseries

Development of the Non-CVRC Project site would not interfere or impact the movement of native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The Non-CVRC Project site lacks migratory wildlife corridors and wildlife nursery sites. No impact.

5.8 Impacts to Jurisdictional Water Resources

Development of the Non-CVRC Project site will not impact waters or wetlands subject to the jurisdiction of the Corps, CDFW, and/or Regional Board. None of these resources are present on the Non-CVRC Project site. Specifically, development of the Non-CVRC Project site will not impact federally protected wetlands as defined by Section 404 of the CWA (including but limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means.

5.9 Indirect Impacts

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Potential indirect effects associated with development include water quality impacts from associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities.

The Non-CVRC Project site lacks natural lands and is adjacent to active agriculture, high density residential development, and rural residential development. The biological resources on-site are degraded and heavily dominated by nonnative species, as are the biological resources adjacent to the site. The potential for development of the Non-CVRC Project site to indirectly impact biological resources to a significant degree is none. Potential indirect effects to biological resources would be less than significant.

5.10 Cumulative Impacts

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, may or may not be deemed a substantial impact, but when considered in addition to (considerable contribution to) the impacts of related projects in the area, would be considered potentially significant. “Related projects” refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project.

For biological resources potentially present and impacted by development of the Non-CVRC Project site (raptor habitat, loggerhead shrike habitat, and bat habitat), the degree of contribution to the regional decline of these resources is judged to not be considerable at the project and regional levels.

6.0 MITIGATION/AVOIDANCE MEASURES

The following discussion provides project-specific mitigation/avoidance measures for potential impacts to special-status resources.

6.1 Burrowing Owl

This section provides the necessary avoidance measures for the Non-CVRC Project site to ensure no direct impacts to burrowing owl.

A qualified biologist will conduct a focused survey for burrowing owl following CDFW's recommended survey guidelines (2012). This survey, consisting of four visits, would to occur between 15 February and 15 July. Specific survey details are provided in CDFW's March 2012 recommended guidelines. If the species is found, an eviction plan will be drafted and provided to CDFW for approval. Eviction can only occur when the owls are not nesting.

If the species is not found during the focused survey, and the focused survey is completed more than 14 days prior to ground disturbance, a preconstruction presence/absence survey for burrowing owl within 14 days prior to each phase of development (including clearing and grubbing) will be necessary to ensure no mortality to the species occurs (CDFW 2012). If burrowing owls are detected, a mitigation and eviction plan for that phase will be drafted and provided to the CDFW for approval. Eviction can occur only when the owls are not nesting.

6.2 Native Nesting Birds

As presented in Section 5.6, development of the Non-CVRC Project site does not pose a biologically significant impact to native nesting birds under CEQA. This is because the species of native birds with potential to nest on the Non-CVRC Project site are very common to abundant to the region (e.g. house finch, killdeer) and the number of individuals possibly impacted would not substantially reduce existing populations. The MBTA and Fish and Game Code do not make a distinction on populations, but instead prohibit the "take" of any native bird.

As such, the following is a recommendation for complying with the MBTA and the Fish and Game Code. Vegetation clearing of each phase will be conducted outside of the nesting season (January 1 through August 31). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within three days prior to any disturbance of the Non-CVRC Project site phase, including disking, demolition activities, and grading. If active nests of native species are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Typically established buffers are greater for raptors than songbirds and depend upon the species, the nesting stage, and type of construction activity proposed. The buffer should be 300 feet for raptors and 150 feet for songbirds; unless specifically determined by a qualified biologist familiar with the nesting phenology of the nesting species.

There are no specific protocols for nesting bird surveys or for buffering requirements once nests are found. The key is to ensure that no direct mortality of a native bird, which when nesting includes eggs and young. Implementation of this measure will ensure the Non-CVRC Project site applicant is not in violation of the MBTA and Fish and Game Code.

6.3 Level of Significance after Mitigation

With the implementation of the mitigation measures, potential impacts to burrowing owl (if present) would be reduced to less than significant under CEQA. Because impacts from the development of the Non-CVRC Project site would be mitigated to less than significant, the Project's cumulative impacts similarly would not be significant and hence not be cumulatively considerable.

7.0 REFERENCES

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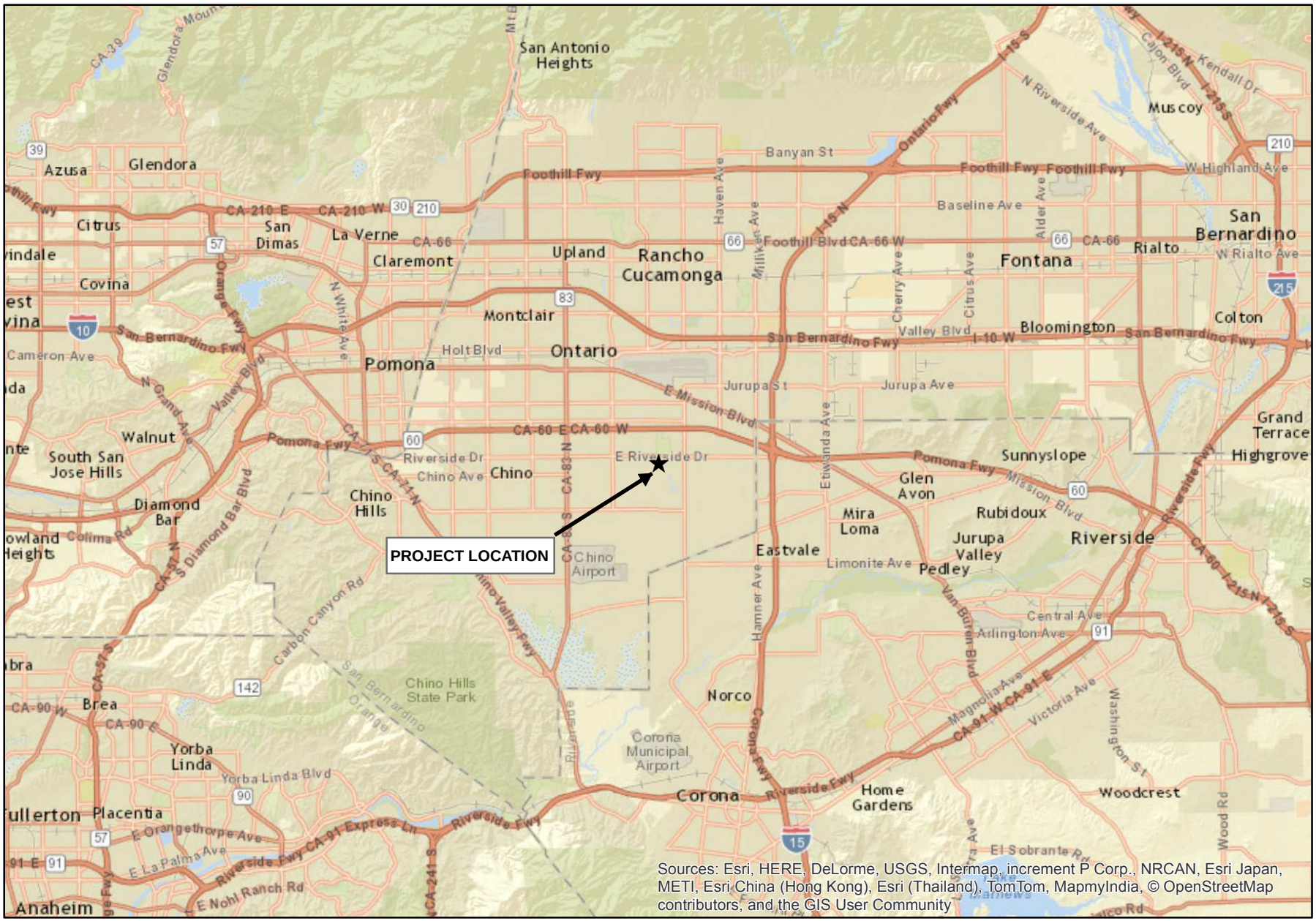
8.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Signed: Brian A. Campbell Date: August 19, 2015

s:0300-60d.rpt_nonCVRC_clean.docx

EXHIBITS



Source: ESRI World Street Map

N

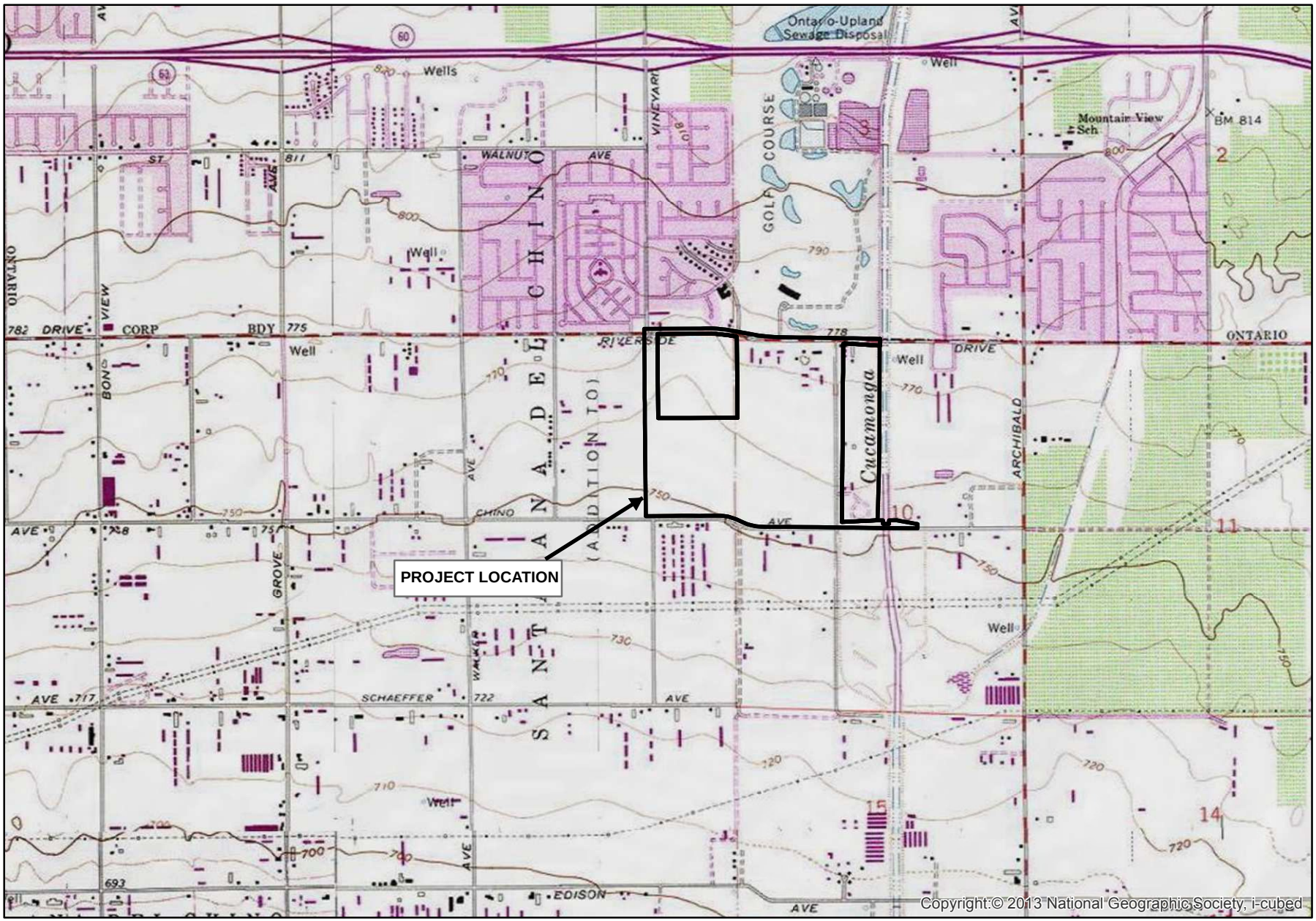
0 2 4 8 Miles

ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Guasti, CA quadrangle

N

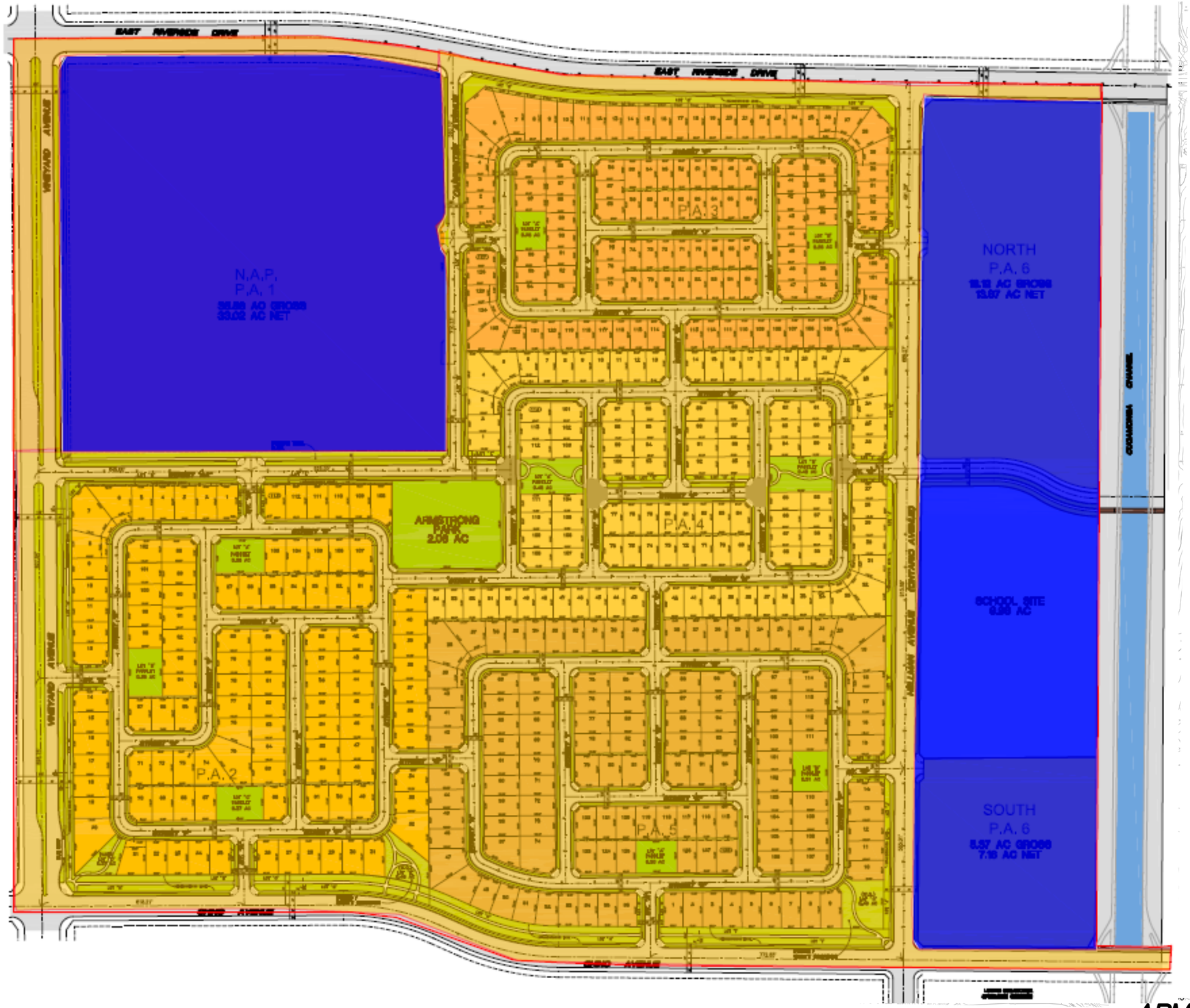
0 1,000 2,000 4,000 Feet

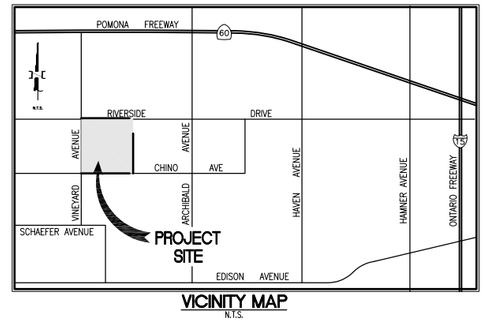
ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2





VICINITY MAP
N.T.S.

LEGEND

CVRC Project Site
T.C.E.

Specific Plan Boundary (Including Offsite Improvements)

Non-CVRC Project Site

NORTH

0 140 280 560

ARMSTRONG RANCH SPECIFIC PLAN PROJECT
Project Site

GLENN LUKOS ASSOCIATES

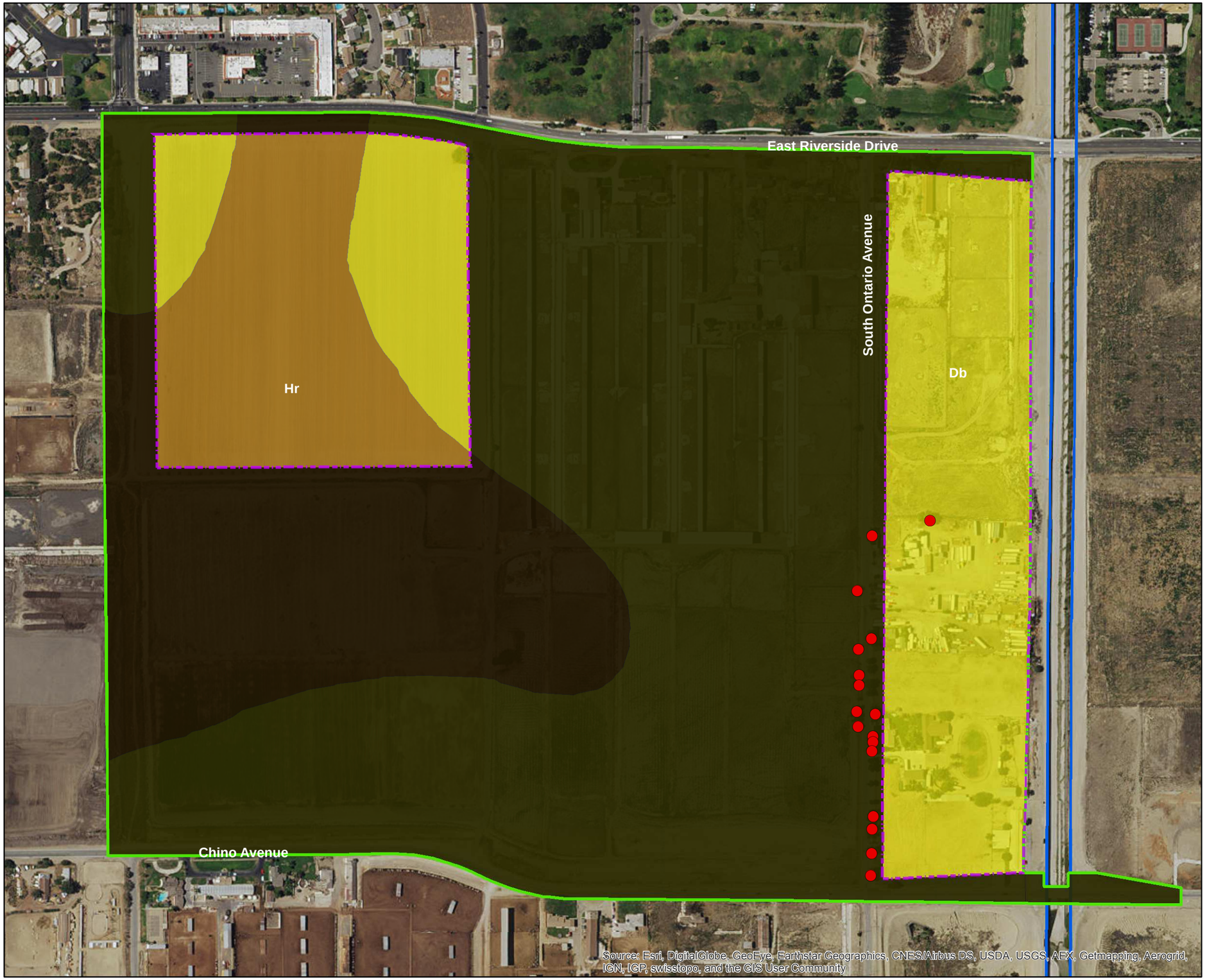
Exhibit 3

DATE REVISED: MARCH 26, 2015
DATE PREPARED: MARCH 23, 2015

TENTATIVE TRACT NO. 19966
DISTURBED AREA PLAN
DE BOER PARCELS
ARMSTRONG RANCH SPECIFIC PLAN

NEW MODEL COLONY
CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA

I:\80350\PRELIM\DISTURBED AREA.dwg 3/24/15



Legend

- Non-CVRC Project Site
- Specific Plan Boundary
- CVRC Lands
- Db - DELHI FINE SAND
- Hr - HILMAR LOAMY FINE SAND
- Cucamonga Channel

N

0 175 350 700

Feet

ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 4

Legend

- Potential Raptor Nesting
- Non-CVRC Project Site
- Specific Plan Boundary
- Cucamonga Channel
- CVRC Lands
- Agriculture
- Developed/Disturbed
- Ruderal

N

0 175 350 700

Feet

ARMSTRONG RANCH SPECIFIC PLAN PROJECT

Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 5

Photograph 1: Looking south along South Ontario Avenue; Project site on left side of road.

Photograph 2: View of Cucamonga Creek Flood Control Channel adjacent to east boundary of Project site.

Photograph 3: Representative view of Project site lands. Looking north from Chino Avenue.

Photograph 3: Close up view of soils inside horse corral.

GLENN LUKOS ASSOCIATES

Exhibit 6

Armstrong Ranch – non CVRC Project Site

Site Photographs

APPENDICES

APPENDIX A: FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows Jepson Flora Project (2013)[1]. An asterisk (*) denotes a non-native species.

GYMNOSPERMS

Pinaceae – Pine Family
* *Pinus* sp., pine

EUDICOTS

Anacardiaceae – Sumac Family
* *Schinus molle*, Peruvian Pepper-tree

Asteraceae – Sunflower Family
Ambrosia acanthicarpa, Annual Bur-sage
Erigeron canadensis, Canada Horseweed
Helianthus annuus, Common Sunflower
* *Lactuca serriola*, Prickly Lettuce
* *Senecio vulgaris*, Common Groundsel
* *Silybum marianum*, Blessed Milk Thistle
* *Sonchus oleraceus*, Common Sow Thistle
* *Verbesina encelioides*, Golden Crownbeard

Portulacaceae – Purslane Family
*- *Portulaca oleracea*, Common Purslane

Boraginaceae – Borage Family
Heliotropium curassavicum, Salt Heliotrope

Brassicaceae – Mustard Family
* *Brassica nigra*, Black Mustard
* *Lepidium* sp., peppergrass
* *Sisymbrium irio*, London Rocket

Geranaiacea – Geranium Family
* *Erodium cicutarium*, Red-stemmed Storksbill

Chenopodiaceae – Goosefoot Family
* *Atriplex semibaccata*, Berry Saltbush
* *Chenopodium album*, Lamb's-quarters
* *Chenopodium murale*, Nettle-leaved Goosefoot
* *Chenopodium* sp., pigweed
* *Salsola* tragus, Prickly Russian-thistle

Juglandaceae – Walnut Family
* *Juglans regia*, English Walnut

Malvaceae – Mallow Family
* *Malva parviflora*, Cheeseweed

[1] Jepson Flora Project (B. D. Baldwin, D. J. Keil, S. Markos, B. D. Mishler, R. Patterson, T. J. Rosatti, and D. H. Wilken, eds.) [JFP]. 2013. *Jepson Flora Project*. Accessed through 31 Oct 2014. Facets of this extensive online resource include the Jepson eFlora, available at http://ucjeps.berkeley.edu//IJM.html and Jepson Online Interchange (JOI), available at http://ucjeps.berkeley.edu/interchange.html. The latter enables searches of the Index to California Plant Names (ICPN) for nomenclature, status, and relationships, often with links to helpful details and discussion. All information incorporated here was accessed after, or confirmed accurate through, inclusion of the "Errata and Small Changes" at http://ucjeps.berkeley.edu/JM12_errata.html (dated 01 Jul 2013) and "Supplement 1 to" TJM2 at http://ucjeps.berkeley.edu/IJM_suppl_summary.html, (dated Jul 2013).

Myrtaceae – Myrtle Family
* *Eucalyptus* sp., gum tree

Polygonaceae – Buckwheat Family
* *Polygonum aviculare*, Common Knotweed

Urticaceae – Nettle Family
* *Urtica urens*, Dwarf Nettle

Zygophyllaceae – Caltrop Family
* *Tribulus terrestris*, Puncture Vine

MONOCOTS

Arecaceae – Palm Family
* *Washingtonia robusta*, Mexican Fan Palm
* *Washingtonia robusta x filifera*, Mexican/California Fan Palm hybrid

Poaceae – Grass Family
* *Arundo donax*, Giant Reed
* *Bromus diandrus*, Ripgut Brome
* *Bromus madritensis*, Spanish Brome
* *Cynodon dactylon*, Bermuda Grass
* *Hordeum* sp., barley
* *Schismus barbatus*, Mediterranean Schismus

APPENDIX B: FAUNAL COMPENDIUM

The faunal compendium lists species that were either observed within or adjacent to the Project site. Taxonomy and common names are taken from the AOU (1998 et seq.)[2] for birds, Crother (2012)[3] for amphibian, turtle, and reptile taxonomy, and Wilson and Reeder (2005)[4] for mammals.

CLASS REPTILIA: REPTILES

Phrynosomatidae – Spiny Lizard Family
Sceloporus occidentalis, Western Fence Lizard

CLASS AVES: BIRDS

Anatidae – Swan, Goose, and Duck Family
Anas platyrhynchos, Mallard

Accipitridae – Hawk Family
Accipiter cooperii, Cooper's Hawk

Charadriidae – Plover Family
Charadrius vociferus, Killdeer

Scolopacidae – Sandpiper Family
Tringa melanoleuca, Greater Yellowlegs

Laridae – Gull and Tern Family
Larus californicus, California Gull

Columbidae – Pigeon and Dove Family
* *Columba livia*, Rock Pigeon
* *Streptopelia decaocto*, Eurasian Collared-Dove
Zenaida macroura, Mourning Dove

Tyrannidae – Tyrant Flycatcher Family
Sayornis nigricans, Black Phoebe^
Sayornis saya, Say's Phoebe

Corvidae – Jay and Crow Family
Corvus brachyrhynchos, American Crow
Corvus corax, Common Raven

Alaudidae – Lark Family
Eremophila alpestris, Horned Lark

Hirundinidae – Swallow Family
Hirundo rustica, Barn Swallow
Stelgidopteryx serripennis, Northern Rough-winged Swallow

Mimidae – Thrasher Family
Mimus polyglottos, Northern Mockingbird

Sturnidae – Starling Family
* *Sturnus vulgaris*, European Starling

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[2] American Ornithologists' Union 1998. The A.O.U. Checklist of North American Birds, seventh edition. American Ornithologists' Union, Washington D.C.; and 2000, 2002, 2003, and 2004 supplements.

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Motacillidae – Pipit and Wagtail Family
Anthus rubescens, American Pipit

Parulidae – Wood-Warbler Family
Oreothlypis celata, Orange-crowned Warbler
Geothlypis trichas, Common Yellowthroat
Setophaga coronata, Yellow-rumped Warbler

Emberizidae – Sparrow Family
Passerculus sandwichensis, Savannah Sparrow
Melospiza lincolnii, Lincoln's Sparrow
Melospiza melodia, Song Sparrow
Zonotrichia leucophrys, White-crowned Sparrow

Icteridae – Blackbird and Oriole Family
Euphagus cyanocephalus, Brewer's Blackbird

Fringillidae – Finch Family
Haemorhous mexicanus, House Finch

Passeridae – Old World Sparrow Family
* *Passer domesticus*, House Sparrow

CLASS MAMMALIA: MAMMALS

Sciuridae – Squirrel Family
Spermophilus beecheyi, California Ground Squirrel

Geomyidae – Pocket Gopher Family
Thomomys bottae, Botta's Pocket Gopher