Appendix D Biological Resources Technical Report

Appendices

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Biological Resources Technical Report

Brea 265 Specific Plan
City of Brea, Orange County, California

FINAL REPORT

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February 2022

CADRE Environmental

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GLOSSARY

APN	Assessor's Parcel Number
BMP	Best Management Practices
CDFG	California Department of Fish and Game (CDFW effective Jan 1st 2013)
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Ranking
CWA	Clean Water Act
EIR	Environmental Impact Report
FAC	Facultative (wetland indicator status)
FACW	Facultative Wetland (wetland indicator status)
FESA	federal Endangered Species Act
FMZ	Fuel Modification Zone
GIS	Geographic Information System
GLA	Glenn Lukos Associates
GPS	Global Positioning System
HMMP	Habitat Mitigation Monitoring Plan
HR	Hillside Residential Ordinance City of Brea Standards
LDR	Low Density Residential
MCV II	A Manual of California Vegetation, Second Edition
NCCP/HCP	Natural Community Conservation Plan/Habitat Conservation Plan
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
OHWM	Ordinary High Water Mark
PBF	Physical and Biological Features
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	California Species of Special Concern
UPL	Upland (wetland indicator status)
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WDR	State Waste Discharge Requirements

APPENDIX A/B - FLORAL/FAUNAL COMPENDIUM

INTRODUCTION

The following biological resources technical report describes a detailed assessment of potential sensitive natural resources located within and immediately adjacent to the Brea 265 Specific Plan Project Site. Specifically, the report has been prepared to support the preparation of an Environmental Impact Report (EIR) to ensure compliance with the California Environmental Quality Act (CEQA), State and Federal Endangered Species Acts (CESA and FESA), the Federal Clean Water Act (CWA), California Fish and Game Codes, and review process conducted by the City of Brea, Orange County, California.

As discussed below, the assessment includes a thorough literature review, site reconnaissance characterizing baseline conditions (including floral and faunal and dominant vegetation communities), focused sensitive species surveys, impact analysis, and proposed mitigation measures. 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.

PROJECT LOCATION/DESCRIPTION

The 262.10-acre Brea 265 Specific Plan project site, Assessor's Parcel Numbers (APNs) 320-073-08, 320-071-29, 308-011-23, 322-031-24, 322-031-12, 322-031-11, 322-031-13, 322-031-14, 322-031-20, 322-031-21, 320-072-02 and 322-031-19 (Project Site) is located in the central region of the City of Brea and City of Brea Sphere of Influence, Orange County, California as illustrated in Figure 1, *Regional Location Map* and Figure 2, *Project Site Map*. This report also evaluates impacts to an offsite 0.45-acre (APN 306-032-01) north of the Project Site.

Specifically, the Project Site is located within an unsectioned area of Township 2, Range 5 west, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Yorba Linda (dated 1964 and photorevised in 1981). The Project Site is bordered by Carbon Canyon Dam to the east, bordered and bisected by Carbon Canyon (State Route 142)/East Lambert Roads to the north and bordered/bisected by Valencia Avenue and North Rose Drive in the central and southwest region. With the exception Carbon Canyon Regional Park extending from the northeast Project Site boundary, the balance of the property is bounded by residential developments and institutional facilities (The Olinda Elementary School, the Brea Sports Park, and the mixed-use community of La Floresta) as illustrated in Figure 2, *Project Site Map*.

The majority of the Project Site is an active oil operations site operated by Aera Energy LLC and the southern region (APN's 322-031-14, 322-031-20, 322-031-21, and 322-031-19) is an active agricultural area. The Project Site has been used for oil production continuously since the early 1900s. Of the approximately 190 wells drilled on the site 110 remain in operation and produce approximately 500 barrels per day. The majority of the site is relatively flat with elevations gradually increasing in the north-eastern portions of the project, falling into the 0-10% slope range.

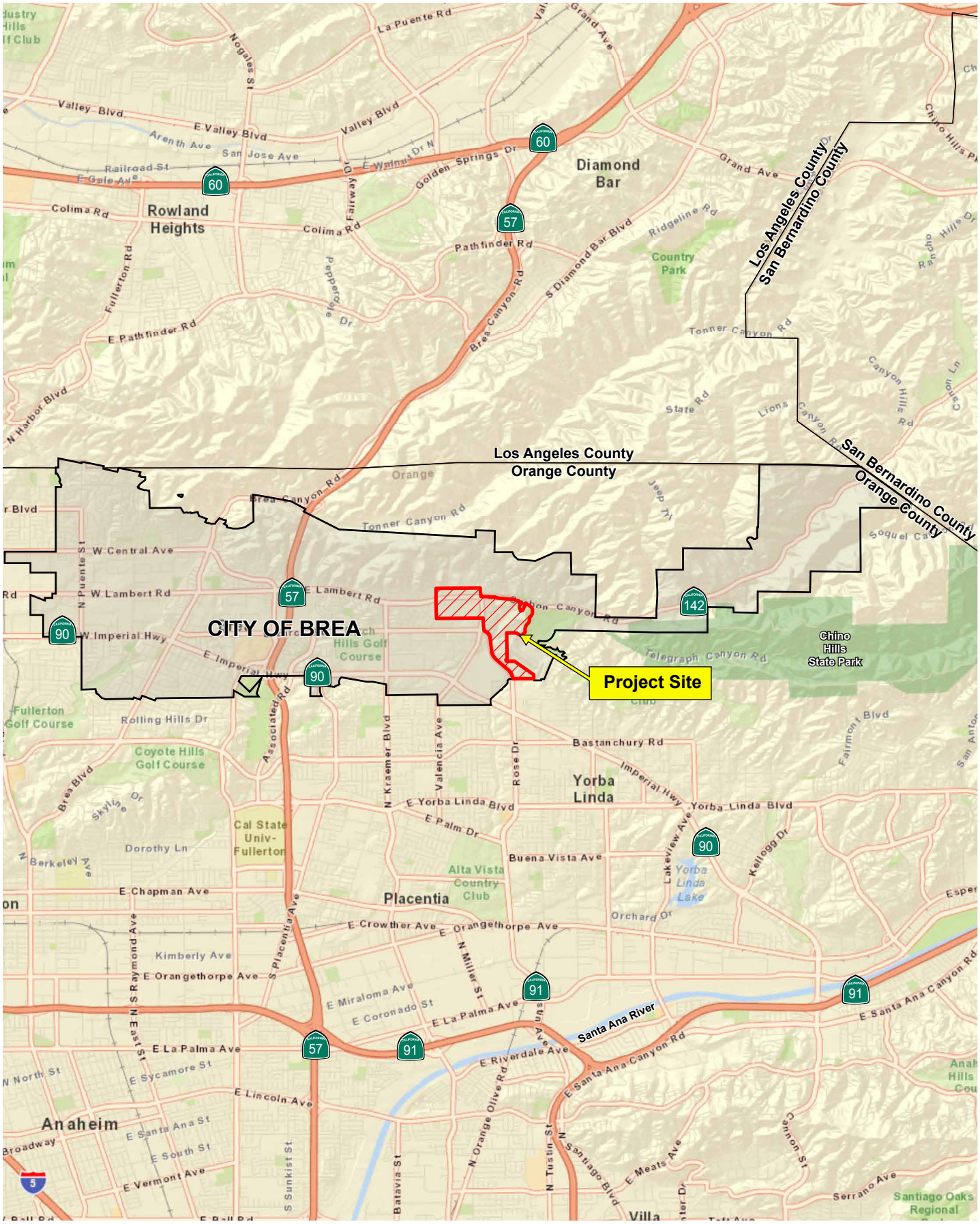

Figure 1 - Regional Location Map

Biological Resources Technical Report
Brea 265 Specific Plan

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not to scale

Figure 2 - Project Site Map

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Brea 265 Specific Plan

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N

1 inch = 600 feet

The Brea 265 Specific Plan proposes a master planned residential community of low-, medium-, and high-density residential neighborhoods, parks, recreational amenities and open space, linked together by an extensive trail network that connects to the Tracks at Brea and other regional systems. At buildout, the Proposed Project would provide low density units, medium-density units, and high-density units, totaling 1,100 units with an overall average density of approximately 4 dwelling units per acre, provide up to 15.1-acres of parks/recreations uses (including up to 13 acres of Sports Park uses adjacent to the existing Brea Sports Park and a 2.0-acre Trail Staging Area) and approximately 47.50-acres of open space. These acreages include an approximately 1.4-acre site on the northeast corner of Valencia and Rose Dr. option for additional landscaped open space.

Once the project entitlements are complete, all on-site oil operations would be discontinued and abandoned, and wells and production facilities would be remediated in accordance with Federal, State and local regulations. No residual oil operations will remain in the proposed residential community. The Brea 265 Specific Plan would change its existing HR and LDR General Plan land use designations to Brea 265 Specific Plan, and change the current HR Hillside Residential and R-1 Single-Family Residential zoning designations to "Brea 265 Specific Plan."

PROJECT BACKGROUND

Interagency Meetings

The following outline summarizes interagency meetings held to present/discuss the existing biological conditions, anticipated impacts to sensitive resources, critical habitat, jurisdictional features, and mitigation approaches. Representative agencies/jurisdictions included the United States Army Corps of Engineers (USACE) and United States Fish and Wildlife Service (USFWS).

- July 9th, 2019. USFWS/Aera Energy, Inc./ Glenn Lukos Associates (GLA) – site visit
- August 8th, 2019. USACE/Aera Energy, Inc./GLA – site visit

Collectively the interagency meetings resulted in directives to achieve the following goals.

- Mitigate for impacts to occupied coastal California gnatcatcher habitat
- Mitigate for impacts to coastal California Gnatcatcher USFWS designated critical habitat.
- Verify jurisdictional delineation and review proposed mitigation options.

The preceding agency directives/goals have been achieved and incorporated into the overall project design as presented in the following biological resources technical report.

LITERATURE REVIEW

Existing biological resource conditions within and adjacent to the Project Site were initially investigated through review of pertinent scientific literature. Federal register listings, protocols, and species data provided by the USFWS were reviewed in conjunction with anticipated Federally listed species potentially occurring within the Project Site. The California Natural Diversity Database (CNDDB 2022a), a CDFW Natural Heritage Division species account database, was also reviewed for all pertinent information regarding the locations of known occurrences of sensitive species in the vicinity of the property. In addition, numerous regional floral and faunal field guides were utilized in the identification of species and suitable habitats. Combined, the reviewed sources provided an excellent baseline from which to inventory and review the biological resources potentially occurring in the area. Other sources of information included the review of unpublished biological resource letter reports and assessments.

Other CDFW reports and publications consulted include the following:

- Special Animals (CDFW 2022b);
- Special Vascular Plants and Bryophytes List (CDFW 2022c);
- Endangered, Threatened, and Rare Plants of California (CDFW 2022d); and
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2022e);

FIELD SURVEYS

The field study focused on a number of primary objectives that would comply with CEQA requirements, including (1) general reconnaissance survey and vegetation mapping; (2) general biological surveys; (3) habitat assessments for special-status plant species; (4) focused surveys for special-status plants; (5) habitat assessments for special-status wildlife species; (6) focused surveys for special-status animals; and (7) jurisdictional delineation. Specifically, the focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDB [CDFW 2022a], CNPS 8th edition online inventory (CNPS 2022), Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project Site were conducted on foot in the proposed development areas for each target plant or animal species identified below. Biological studies were conducted in order to identify and analyze potential direct, indirect and cumulative impacts to biological resources associated with development of the Project Site.

Observations of all plant and wildlife species were recorded during each of the above-mentioned survey efforts [Appendix A: Floral Compendium and Appendix B: Faunal Compendium].

As outlined in Table 1, *Summary of Biological Surveys for the Project Site*, the studies conducted include the following:

- Performance of vegetation mapping;
- Performance of site-specific habitat assessments and associated focused 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; and
- Delineation of aquatic resources (including the potential for wetlands and riparian habitat) potentially subject to the jurisdiction of the USACE, Regional Water Quality Control Board (RWQCB), and CDFW.

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

Survey Type	2018 Survey Dates	Biologists
Focused Burrowing Owl Surveys	**4/9, 5/2, 5/25, 7/3**	**JA**
Focused California Gnatcatcher Surveys	**4/6, 4/13, 4/19, 5/4, 5/11, 5/18**	**KL**
Vegetation Mapping and Habitat Assessment	**4/17, 4/19, 5/11, 6/18**	**KL, TB**
Jurisdictional Delineation	**4/25**	**KL, TB**
Focused and General Plant Surveys	**4/17, 4/18, 4/20, 4/25 5/18, 6/18**	**KL, DM, TB, JS**
Focused Bat Surveys	**7/3, 7/9**	**JA, SC. TB**
Survey Type	**2019 Survey Dates**	**Biologists**
Jurisdictional Delineation	**4/22, 8/8**	**TB**
Survey Type	**2020 Survey Dates**	**Biologists**
Jurisdictional Delineation	**5/4, 5/18**	**TB**
Focused Crotch Bumblebee Surveys	**4/11, 5/7, 7/6, 2020**	**JA, TB**
Survey Type	**2021 Survey Dates**	**Biologists**
Vegetation Mapping & JD	**7/12, 7/23**	**TB**

JA = Jeff Ahrens, KL = Kevin Livergood, TB = Tony Bomkamp, SC = Stephanie Cashin, DM = Dave Moskovitz, JS = Jillian Stephens

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

- Listing through the Federal and/or State Endangered Species Act (FESA, CESA);
- Occurrence in the CNPS Rare Plant Inventory (Rank 1A/1B, 2A/2B, 3, or 4);
- Occurrence in the CNDDB inventory.

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

- Listing through the FESA and/or CESA;
- Designation by the State as a Species of Special Concern (SSC) or California Fully Protected (CFP) species.

Vegetation communities and habitats were considered "special-status" based on one or more of the following criteria:

- Global (G) and/or State (S) ranking of category 3 or less based on CDFW;
- Riparian habitat;
- Occurrence of vegetation community or habitat in the CNDDB inventory.

Floral Resources

A site-specific survey 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 mapping according to the List of Vegetation Alliances and Associations; and (5) habitat assessments and focused surveys for special-status plants.

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:

- California Native Plant Society, Rare Plant Program. 2018/2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) for the USGS 7.5' quadrangles: Yorba Linda, San Dimas, Ontario, Prado Dam, Black Star Canyon, Orange, Anaheim, La Habra, and Baldwin Park (CNPS 2022); and

- CNDDB for the USGS 7.5' quadrangles: Yorba Linda, San Dimas, Ontario, Prado Dam, Black Star Canyon, Orange, Anaheim, La Habra, and Baldwin Park (CNDDB 2022a).

Vegetation alliances within the Project Site were mapped in accordance with A Manual of California Vegetation, Second Edition or MCV II, which is the California expression of the National Vegetation Classification. Where necessary, deviations were made when areas were not consistent with the "membership rules" set forth in the MCV II. Such modifications to the vegetation alliances were designated based on the dominant plant species. Vegetation alliances were mapped in the field directly onto a 200-scale (1" = 200') aerial photograph.

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 associations 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.

All faunal surveys were conducted by GLA biologists Dave Moskovitz, Tony Bomkamp, Jillian Stephens, and Kevin Livergood on April 17th, April 19th, April 25th, May 11th, and June 18th, 2018 to conduct general and focused plant surveys. Surveys were conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). As applicable, surveys were conducted at appropriate times based on precipitation and flowering periods. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project Site. Surveys were conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A, Floral Compendium. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), Munz (1974), and Allen and Roberts (2013).

Faunal Resources

Faunal 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 wildlife species observed within the Project Site is provided in Appendix B: Faunal Compendium. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 6th Edition, Collins and Taggert (2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7th Edition (2009) for birds. The methodology (including any applicable survey protocols) utilized to conduct general surveys, habitat assessments, and/or focused surveys for special-status animals are included below.

General Surveys

Birds - During the general biological and reconnaissance surveys within the Project Site, birds were detected by direct observation and/or by vocalizations, with identifications recorded in field notes.

Mammals - During general biological and reconnaissance surveys within the Project Site, mammals were identified and detected by direct observations and/or by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.). In addition, focused

surveys were conducted for special-status bats as well as common bat species that could potentially roost on the site.

Focused bat surveys were conducted by GLA biologists Jeff Ahrens, Stephanie Cashin and Tony Bomkamp on July 3rd and July 9th, 2018. All surveys were conducted approximately 30 minutes before dusk and extended between three and four hours. Bat surveys were comprised of a combination of acoustic and emergence surveys from throughout the Project Site. Areas determined to support the best bat roosting habitat (including Eucalyptus and palm trees) were visually inspected for evidence of roosting (e.g., urine staining, guano concentrations, and/or audible bats) and were visually and acoustically surveyed for bat emergence.

Two ultrasonic acoustic recording devices were deployed throughout the bat Project Site. Recording devices included two Wildlife Acoustics EchoMeter 2 Pro microphones attached to an Apple iTouch and an Apple iPad. A Seek Compact Pro Thermal imager attached to an iPhone or iPad was used to assist in detecting heat signatures of bats within and exiting from potential roost areas. A combination of walking and driving transects with the ultrasonic devices were also employed throughout the Project Site. Driving transects averaged 5 miles per hour.

All acoustic data was recorded in full spectrum and was processed and analyzed with Sonobat 4.2.2 bat call analysis software using the California Southwest classifier. All acoustic calls were manually reviewed and vetted using multiple Sonobat acoustic reference libraries and reference materials including Echolocation Call Characteristics of California Bats (Humboldt State University, 2018) and Echolocation Call Characteristics of Western U.S. Bats (Humboldt State University, 2018).

Reptiles and Amphibians - During general biological and reconnaissance surveys within the Project Site, reptiles and amphibians were identified incidentally during surveys. Habitats were examined for diagnostic reptile sign, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

Special Status Species

A literature search was conducted to obtain a list of special-status wildlife species with the potential to occur within the Project Site. Species were evaluated based on two factors: 1) species identified by the CNDDB as occurring (either currently or historically) on or in 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. Biologists Tony Bomkamp, Kevin Livergood, and Dave Moskovitz conducted habitat assessments for special-status animal species. An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project Site.

Burrowing Owls

Glenn Lukos Associations biologist Jeff Ahrens conducted focused surveys for the burrowing owl (*Athene cunicularia*) within all suitable habitat areas within the Project

Site. Surveys were conducted in accordance with survey guidelines described in the 2012 California Department of Fish and Game (CDFG) Staff Report on Burrowing Owl Mitigation. The guidelines stipulate that four (4) focused survey visits should be conducted between February 15th and July 15th, with the first visit occurring between February 15th and April 15th. The remaining three (3) visits should be conducted three weeks apart, with at least (1) one visit occurring between June 15th and July 15th. Focused surveys were conducted on April 9th, May 2nd, May 25th and July 3rd, 2018. As recommended by the survey guidelines, the survey visits were conducted between morning civil twilight and 10:00 AM. Weather conditions during the surveys were conducive to avian activity, including burrowing owl.

Surveys were conducted by walking meandering transects throughout areas of suitable habitat. Transects were spaced between 7 meters (m) and 20 m apart, adjusting for vegetation height and density, to ensure 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) to identify potentially occupied burrows. Table 2, Summary of Burrowing Owl Surveys, summarizes the burrowing owl survey visits.

Table 2.
Summary of Burrowing Owl Surveys

Survey Date	Biologist	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Cloud Cover
4/9/18	J. Ahrens	0610-0850	55-64	2-4	Clear
5/2/18	J. Ahrens	0600-0845	51-55	1-3	Overcast
5/25/18	J. Ahrens	0550-0845	57-67	1-3	Clear
7/3/18	J. Ahrens	1720-1935	79-71	1-3	Clear

Source: GLA 2019

Coastal California Gnatcatcher

Glenn Lukos Associations biologist Kevin Livergood (TE-172638-2) conducted focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*) for all suitable habitat areas within the Project Site. Surveys were conducted in accordance with the 1997 USFWS survey guidelines, which during the breeding season (March 15th through June 30th) require a minimum of six (6) surveys (per survey polygon) with at least one week separating each survey visit. The survey guidelines limit individual biologists to surveying a maximum of 80 acres per day. The Project Site contains approximately 13.49 acres of suitable scrub habitat for the coastal California gnatcatcher. Therefore, the survey area was not divided into multiple survey polygons.

Updated focused surveys were conducted on April 6th, April 13th, April 19th, May 4th, May 11th, and May 18th, 2018. Initial protocol surveys were conducted in 2017 in accordance with USFWS survey guidelines (USFWS 1997). Pursuant to the survey guidelines, the surveys were conducted between sunrise and 12:00 p.m. Weather conditions during the surveys were conducive to avian activity. Table 3, *Summary of Coastal California Gnatcatcher Surveys,* summarizes the gnatcatcher survey visits.

Table 3.
Summary of Coastal California Gnatcatcher Surveys

Survey Date	Biologist	Start/End Time	Start/End Temperature (°F)	Start/End Wind Speed (mph)	Cloud Cover
4/6/18	K. Livergood	0700-1130	53-66	2-5	Partly Cloudy
4/13/18	K. Livergood	0715-1200	60-75	3-5	Clear
4/19/18	K. Livergood	0730-1145	53-78	1-3	Clear
5/4/18	K. Livergood	0730-1140	61-83	0-3	Clear
5/11/18	K. Livergood	0740-1200	58-63	3-5	Overcast
5/18/18	K. Livergood	0815-1200	62-66	2-3	Overcast

Source: GLA 2019

Crotch Bumblebee

Focused surveys for were conducted by GLA senior biologists Jeff Ahrens and Tony Bomkamp on April 11 and May 7, 2020 and by Mr. Ahrens on July 6, 2020. Weather conditions during the surveys were conducive to a high level of bee activity. The timing for each survey was adjusted based on the phenology of pollinator host plants available during the field season. Surveys generally took place on sunny days when temperatures were generally above 60° F, wind speeds were calm to low (less than 8 mph).

Due to the fragmented nature of the potential suitable habitat, during each focused survey, the biologists surveyed all suitable flowering areas within the Project site. The surveyor scanned suitable flowering areas for bumble bee activity and focused on those areas. Minimal time was spent in lesser quality habitat. Pursuant to the survey guidelines, focused surveys did not begin for at least two hours after sunrise (or unless bumble bees or other bee species were detected earlier) and were completed no later than two hours before sunset.

Jurisdictional Resources

Prior to beginning the field delineation, a 200-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of USACE/CDFW/Regional Board jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils, and hydrology. Specifically, on April 25th, 2018, April 22nd, 2019, and May 4th and May 18th, 2020 regulatory specialists of Glenn Lukos Associates, Inc. examined the project site to determine the limits of. Potential wetland habitats at the subject site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[1] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)[2]. The presence of an Ordinary High Water Mark

[1] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

[2] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Version 2.0). Ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

(OHWM) was determined using the 2008 Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States[3] in conjunction with the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.[4] While in the field the limits of the OHWM, wetlands as appropriate, and CDFW and Regional Board jurisdiction were recorded using GPS technology and/or on ortho-rectified aerial photographs. Other data were recorded onto the appropriate datasheets.

EXISTING ENVIRONMENTAL SETTING

The following section (Existing Environmental Setting) has been extracted, reviewed and updated from the GLA baseline studies report and modifications have been made to the GLA text to ensure consistency with this document.

This section provides the results of general biological surveys, vegetation mapping, habitat assessments and a jurisdictional delineation for Waters of the United States (including wetlands) subject to the jurisdiction of the USACE, RWQCB, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

The Project Site is not located within or adjacent to an existing or proposed Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) including the NCCP/HCP Central and Coastal Subregion of Orange County.

SURROUNDING LAND USES/TOPOGRAPHY/SOILS

Surrounding Land Uses

The Project Site includes portions on the west and east sides of Valencia Avenue with the area west of Valencia Avenue further divided by East Lambert Road. The Project Site on the east side of Valencia Avenue consists of land associated with oil operations including oil fields, roads and paths, and related equipment and infrastructure. Disturbed, undeveloped land occurs scattered within the oilfield operations. Areas east of Valencia Avenue also support agricultural fields and operations bordering North Rose Drive as shown in Figure 3, *Vegetation Communities Map* and Figure 4 to 7, *Current Project Site Photographs*. The areas west of Valencia Avenue includes active and abandoned nursery facilities while still containing active oil operations. Three (3) ephemeral, disturbed drainages traverse the Project Site including a single drainage in the western region and a drainage with a tributary on the eastern region. Surrounding land uses include residential properties, businesses, and several parks including Carbon Canyon Regional Park to the east and Wildcatters Park to the north.

Topography

[3] Lichvar, R. W., and S. M. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TR-08-12. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. (http://www.crrel.usace.army.mil/library/technicalreports/ERDC-CRREL-TR-08-12.pdf).

[4] Curtis, Katherine E. and Robert Lichevar. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TN-10-1. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory.

The western region of the Project Site is relatively flat, whereas the eastern region has slopes ranging from 2 to 75 percent. Elevations range from approximately 400 to 590 feet above sea level.

Soils

The Natural Resource Conservation Service (NRCS) identifies the following soil types (series) as occurring (currently or historically) within the Project Site as shown in Figure 8, *Soils Association Map*.

- Alo clay, 15 to 30 percent slopes (101)
  This well-drained soil type consists of 85 percent Alo soils and 15 percent minor components. The parent material is residuum weathered from sedimentary rock, and slopes range from 15 to 30 percent. A typical profile for this soil is clay from 0 to 22 inches and weathered bedrock from 22 to 59 inches.
- Anaheim loam, 30 to 50 percent slopes (107)
  This well-drained soil type was formed in fine grained residuum weathered from sandstone and shale. It consists of 85 percent Anaheim soils and 15 percent minor components. The common landform is hillslopes ranging from 30 to 50 percent slope. A typical profile consists of loam from 0 to 26 inches and bedrock from 26 to 54 inches.
- Balcom clay loam, 15 to 30 percent slopes (112), 30 to 50 percent slopes (113)
  This well-drained soil type was formed in calcareous residuum weathered from sandstone and shale. It consists of 85 percent Balcom soils and 15 percent minor components. The common landform is hillslopes ranging from 15 to 30 percent slopes. A typical profile consists of clay loam from 0 to 34 inches and bedrock from 34 to 44 inches.
- Calleguas clay loam, 50 to 75 percent slopes, eroded (134)
  This well-drained soil type consists of 85 percent Calleguas soils and 15 percent minor components. The parent material is residuum weathered from calcareous shale. Hillslopes with 50 to 75 percent slopes are the most common landform. A typical profile consists of clay loam from 0 to 11 inches, channery clay loam from 11 to 15 inches, and bedrock from 15 to 42 inches.
- Metz loamy sand (163)
  This soil type consists of 80 percent Metz soils and 20 percent minor components. The associated landform is alluvial fans with 0 to 2 percent slope. A typical profile consists of loamy sand from 0 to 17 inches, and stratified sand to fine sandy loam from 17 to 63 inches.
- Mocho loam, 2 to 9 percent slopes (167)
  This well-drained soil type consists of 85 percent Mocho soils and 15 percent minor components. The parent material is alluvium derived from sedimentary rock. Alluvial fans with 2 to 9 percent slopes are the most common landform. A typical profile consists of loam from 0 to 60 inches.
- Myford sandy loam, 2 to 30 percent slopes, eroded (173, 175, 176 and 177)
  This soil type is moderately well-drained and commonly occurs on terraces with slopes ranging from 2 to 30 percent. It consists of 75 to 85 percent Myford soils and 15 to 25 percent minor components. The parent material is alluvium derived from sandstone. A typical profile consists of a combination of sandy loam, sandy clay, and sandy clay loam from 0 to 79 inches.

- Pits - Omni clay, drained (187)
  This poorly-drained soil type consists of 85 percent Omni soils and 15 percent minor components. The associated landform is depressions with 0 to 2 percent slope. A typical profile consists of clay from 0 to 17 inches, and silty clay or clay from 17 to 60 inches.
- San Emigdio fine sandy loam, 2 to 9 percent slopes (195)
  This well-drained soil type consists of 85 percent San emigdio soils and 15 percent minor components. The parent material is mixed alluvium derived from igneous, metamorphic, and sedimentary rock. The common landform is alluvial fans ranging from 2 to 9 percent slope. A typical profile for this soil is fine sandy loam from 0 to 7 inches, and stratified gravelly loamy coarse sand to very fine sandy loam from 7 to 61 inches.
- Sorrento loam, 2 to 9 percent slopes (207)
  This well-drained soil type consists of 85 percent Sorrento soils and 15 percent minor components. The parent material is alluvium derived from sedimentary rock. The common landform is alluvial fans ranging from 2 to 9 percent slope. A typical profile for this soil is loam from 0 to 12 inches, silty clay loam from 12 to 62 inches, and sandy loam from 72 to 72 inches.
- Yorba cobbly sandy loam, 30 to 50 percent slopes (223 and 226)
  This well-drained soil type consists of 85 percent Yorba soils and 15 percent minor components. The parent material is sandy and gravelly alluvium derived from mixed substrates. The common landform is terraces with slopes ranging from 30 to 50 percent. A typical profile for this soil is cobbly sandy loam from 0 to 11 inches, gravelly sandy clay loam from 11 to 40 inches, and gravelly sandy loam from 40 to 63 inches.

VEGETATION COMMUNITIES

During vegetation alliance mapping of the Project Site, a total of 34 different vegetation alliances or land-cover types were identified. Table 4, Vegetation Community Acreages, provides a summary of vegetation alliances/land uses and the corresponding acreage; detailed descriptions of each alliance/land use is provided in the following section as shown in Figure 3, *Vegetation Communities* and Figure 4 to 7, *Current Project Site Photographs*. The table below includes CNDDB Rarity Rankings and as appropriate, the threat code listed by the California Invasive Plant Council (Cal-IPC) for invasive plant species.

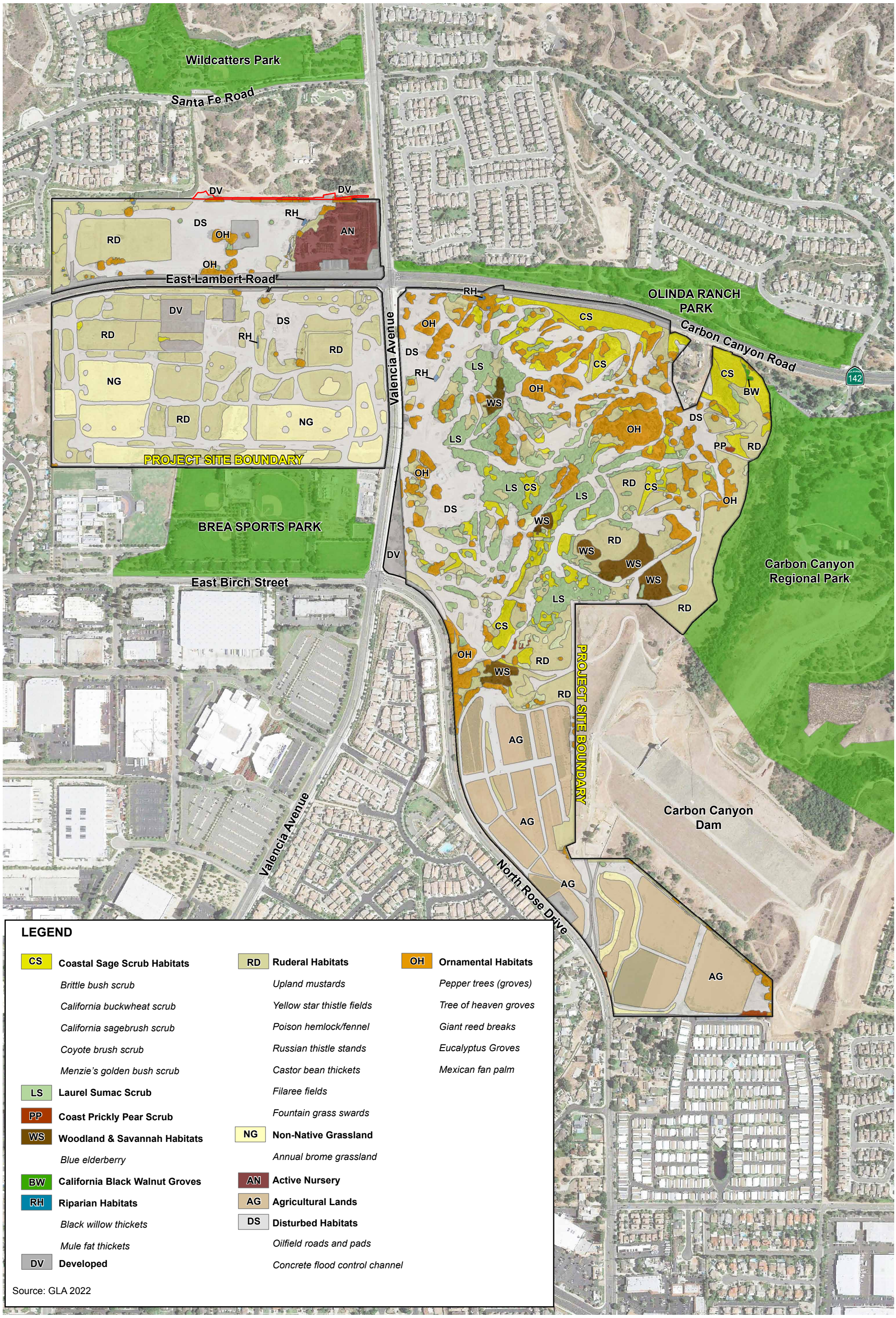


Figure 3 - Vegetation Communities Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

Coastal Sage Scrub Habitat (California Sagebrush Scrub)

Laurel Sumac Scrub in foreground and Peruvian Pepper Trees in background.

Figure 4 - Current Project Site Photographs

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

Blue Elderberry Savannah

Ruderal Habitat.

Figure 5 - Current Project Site Photographs

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

Non-native Grassland (Annual Brome Grassland)

Agricultural Lands

Figure 6 - Current Project Site Photographs

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

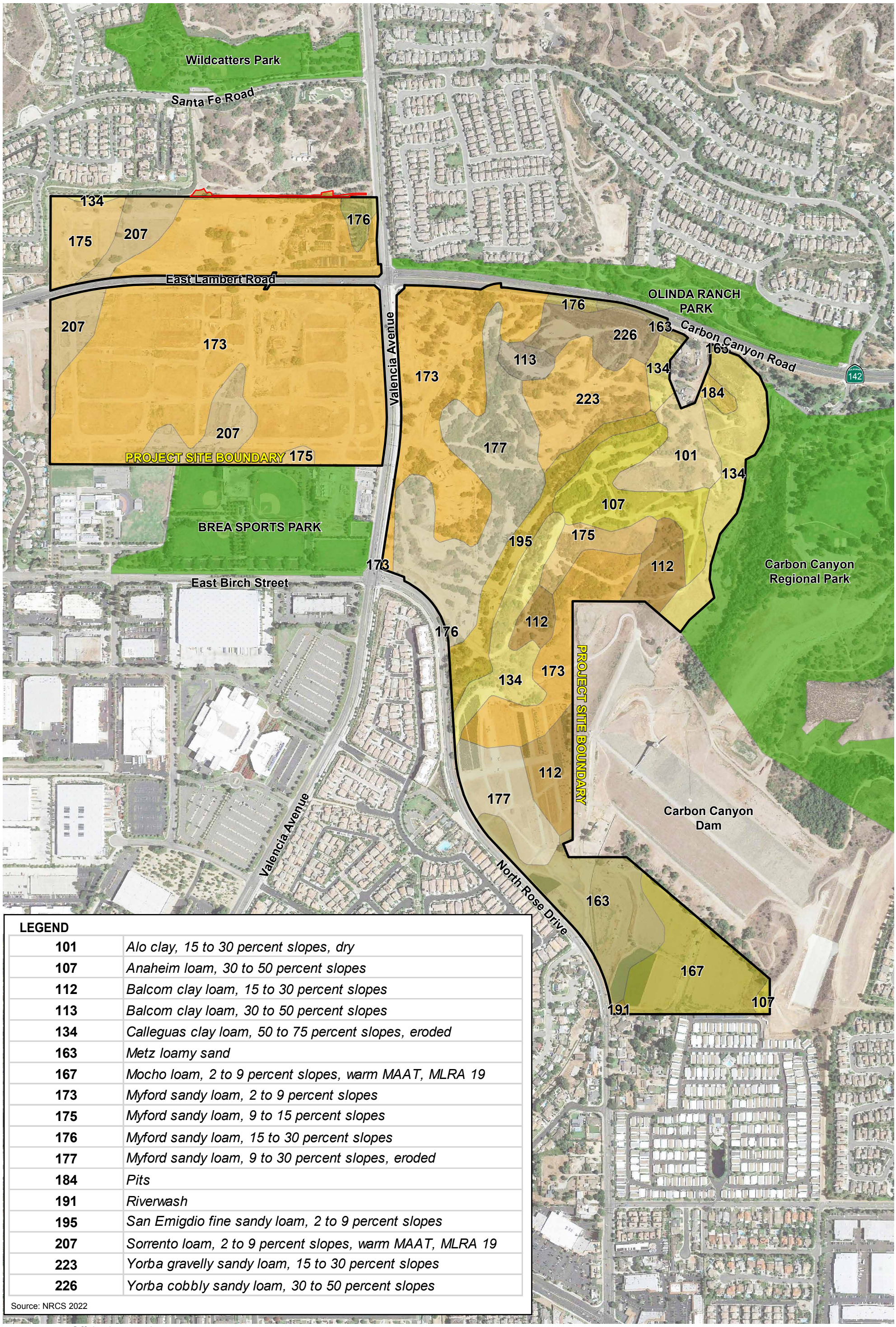
Disturbed (Oilfield Roads and Pads) and Ornamental Habitats (Eucalyptus Groves)

Disturbed (Oilfield Roads and Pads)

Figure 7 - Current Project Site Photographs

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental



LEGEND

101	*Alo clay, 15 to 30 percent slopes, dry*
107	*Anaheim loam, 30 to 50 percent slopes*
112	*Balcom clay loam, 15 to 30 percent slopes*
113	*Balcom clay loam, 30 to 50 percent slopes*
134	*Calleguas clay loam, 50 to 75 percent slopes, eroded*
163	*Metz loamy sand*
167	*Mocho loam, 2 to 9 percent slopes, warm MAAT, MLRA 19*
173	*Myford sandy loam, 2 to 9 percent slopes*
175	*Myford sandy loam, 9 to 15 percent slopes*
176	*Myford sandy loam, 15 to 30 percent slopes*
177	*Myford sandy loam, 9 to 30 percent slopes, eroded*
184	*Pits*
191	*Riverwash*
195	*San Emigdio fine sandy loam, 2 to 9 percent slopes*
207	*Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19*
223	*Yorba gravelly sandy loam, 15 to 30 percent slopes*
226	*Yorba cobbly sandy loam, 30 to 50 percent slopes*

Source: NRCS 2022

Offsite Impact Area

Figure 8 - Soils Association Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

Table 4. Vegetation Communities Acreages

Vegetation Alliances/Land Use Type	Rank	CA Code	Acres (onsite)	Acres (offsite)
Coastal Sage Scrub Habitats				
California sagebrush scrub (Artemisia californica Shrubland Alliance)	G5 S5	32.010.01	9.84	
California buckwheat scrub (Eriogonum fasciculatum Shrubland Alliance)	G5 S5		2.94	
Coyote brush scrub (Baccharis pilularis Shrubland Alliance)	G5 S5		0.34	
Coast prickly pear scrub (Opuntia littoralis Shrubland Alliance)	G3 S3		0.27	
Brittle bush scrub (Encelia farinosa Shrubland Alliance)	G5 S4		0.05	
Chaparral Habitats				
Laurel sumac scrub (Malosma laurina Shrubland Alliance)	G4 S4		16.99	
Woodland & Savannah Habitats				
Blue elderberry savannah (Sambucus nigra Shrubland Alliance)	NA	NA	2.56	
Blue elderberry stands (Sambucus nigra Shrubland Alliance)	S3 G3	*63.410.01	1.54	
Blue elderberry woodland (Sambucus nigra Shrubland Alliance)	S3 G3	*63.410.01	1.37	
Walnut Grove Habitats				
Southern California black walnut groves (Juglans californica Woodland Alliance)	G3, S3.2		0.07	
Riparian Habitats				
Mule fat thickets (Baccharis salicifolia Shrubland Alliance)	G5 S4	63.510.01	0.11	
Black Willow thickets (Salix gooddingii Woodland Alliance)	G4 S3	*61.211.01	0.03	
Non-native Grassland Habitats				
Red brome or Mediterranean grass grasslands (Bromus rubens-Schismus (arabicus, barbatus) Semi-Natural Herbaceous Stands)	Cal-IPC high		16.36	
Ruderal Habitats				
Upland mustards (Brassica (nigra) and Other Mustards Semi-Natural Herbaceous Stands)	Cal-IPC moderate		36.48	
Russian thistle stands (Salsola tragus Semi-Natural Herbaceous Stands)	NA	NA	18.01	
Filaree Fields	NA	NA	5.10	
Poison hemlock or fennel patches (Conium maculatum-Foeniculum vulgare Semi-Natural Herbaceous Stands)	Cal-IPC moderate		0.90	
Castor bean thickets (Ricinus communis Semi-Natural Shrubland Alliance)	NA	NA	0.80	0.05
Yellow star-thistle fields (Centaurea (solstitialis, melitensis) Semi-Natural Herbaceous Stands)	Cal-IPC moderate		0.30	
Fountain grass swards (Pennisetum setaceum Semi-Natural Herbaceous Stands)	Cal-IPC moderate		0.06	
Ornamental Habitats				
Pepper tree groves (Schinus (molle, terebinthifolius) Semi-Natural Woodland Stands)	Cal-IPC limited	Cal-IPC limited	8.05	
Eucalyptus groves (Eucalyptus (globulus, camaldulensis) Semi-Natural Woodland Stands)	Cal-IPC moderate	79.100.00	6.80	0.06
Pepper tree or Laurel sumac groves (Schinus (molle, terebinthifolius)-Malosma laurina Semi-Natural Woodland Stands)	NA	NA	3.13	
Pepper tree individuals (Schinus (molle, terebinthifolius) Semi-Natural Woodland Stand)	Cal-IPC limited		1.76	0.07
Giant reed breaks (Arundo donax Semi-Natural Herbaceous Stands)	Cal-IPC high	42.080.01	0.15	0.02
Other Ornamental	NA	NA	0.07	
Mexican fan palm (Washingtonia robusta Semi-Natural Woodland Alliance)	NA	NA	0.03	
Tree of Heaven Groves (Ailanthus altissima Semi-Natural Woodland Stands)	NA	NA	0.01	
Developed/Disturbed				
Oil Field Roads and Pads	NA	NA	83.52	0.24
Agriculture	NA	NA	27.71	
Developed	NA	NA	10.61	0.01
Active Nursery	NA	NA	4.61	
Bare	NA	NA	1.37	
Concrete Flood Control Channel	NA	NA	0.16	
		TOTAL	**262.10**	**0.45**

Source: GLA 2022

Coastal Sage Scrub Habitats

California sagebrush scrub (*Artemisia californica* Shrubland Alliance) - Approximately 9.84-acres, primarily in the areas of the Project Site east of Valencia Avenue, consist of California sagebrush scrub (*Artemisia californica*). These areas, which generally occur in small isolated patches, match the membership rule for the *Artemisia californica* Shrubland Alliance in the MCV II which requires greater than 60 percent relative cover of California sagebrush in the shrub canopy. This alliance has a G5 S5 rarity ranking which defines this vegetation type as demonstrably secure in both its global and California range. Other commonly occurring species include California buckwheat, laurel sumac, summer mustard, Russian thistle, and annual grasses.

California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance) - California buckwheat (*Eriogonum fasciculatum*) scrub accounts for approximately 2.94-acres along the northern edge of the portion of the Project Site east of Valencia Avenue. This native vegetation community matches the membership rule for the *Eriogonum fasciculatum* Shrubland Alliance in the MCV II which requires greater than 5 percent absolute cover of California buckwheat in the shrub canopy. The *Eriogonum fasciculatum* shrubland alliance has a G5 S5 rarity ranking which is defined as demonstrably secure in both its global and California range.

Coyote brush scrub (*Baccharis pilularis* Shrubland Alliance) - Coyote brush (*Baccharis pilularis*) scrub accounts for approximately 0.34-acre throughout the entire Project Site. In these areas, coyote brush covers over 50 percent of the shrub layer; however, other occurring species include California sagebrush, Russian thistle, and summer mustard. This vegetation cover is part of the *Baccharis pilularis* Shrubland Alliance which has a G5 S5 rarity ranking. This rarity ranking is defined as secure in both its global and California range.

Coast prickly pear scrub (*Opuntia littoralis* Shrubland Alliance) - In the portion of the Site east of Valencia Avenue and at the southern end of the site, approximately 0.27-acre consists of coast prickly pear (*Opuntia littoralis*) scrub, which occurs in small isolated patches. This native vegetation alliance matches and is classified as the *Opuntia littoralis* Shrubland Alliance in the MCV II which has a rarity ranking of G3 S3. However, however, none of the small patches meets the minimum mapping unit as set forth in the CNDDB. Specifically, the Survey of California Vegetation and Mapping Standards (CDFW, 2020) specifies that the minimum mapping unit (MMU) is usually 1 or 2 acres, varying with the size of the project. Wetlands and other special vegetation types are mapped at ¼ acre, but none of the cactus patches onsite cover the 0.25-acre minimum and is thus below the MMU standards identified.

Brittle bush scrub (*Encelia farinosa* Shrubland Alliance) - Approximately 0.05-acre near the central-eastern boundary of the area of the Project Site east of Valencia Avenue consists of a patch of brittle bush (*Encelia farinosa*) scrub. This vegetation type matches the *Encelia farinosa* Shrubland Alliance which has a rarity ranking of G5 S4 which is defined as secure within and outside of California. This alliance a desert alliance and has been introduced in this area. Summer mustard is also common in this alliance.

Chaparral Habitats

Laurel sumac scrub (*Malosma laurina* Shrubland Alliance) - Laurel sumac scrub covers approximately 16.99-acres primarily in the portion of the Project Site east of Valencia Avenue. In these areas, laurel sumac exhibits greater than 50 percent relative cover in the shrub canopy, which fits the MCV II requirement for the *Malosma laurina* Shrubland Alliance (G4 S4). This alliance has a rarity ranking of G4 S4 which is defined as secure throughout its range. Other commonly occurring species include California sagebrush, southern California black walnut, California buckwheat, eucalyptus, Peruvian pepper, blue elderberry, summer mustard, and Russian thistle.

Woodland & Savannah Habitats

Blue elderberry stands (*Sambucus nigra* Shrubland Alliance) - Approximately 1.54-acres scattered throughout the eastern parcel of the Project Site consist of blue elderberry stands. In these areas, blue elderberry covers greater than 50-percent of the shrub overstory and cover a minimum of 0.20-acre. Other species include Russian thistle, California sagebrush, California walnut, laurel sumac, and pepper tree. Due to the dominance of blue elderberry, this vegetation type belongs to the *Sambucas nigra* Shrubland Alliance which has a G3 S3 rarity ranking. S3 alliances are defined as susceptible to becoming extirpated in the state, and may be, if additional populations are destroyed. In addition to these stands, additional areas consist of individual or small groupings that account for less than 0.20-acre and do not meet the minimum mapping unit of 0.25-acre recognized by the CNDDB for special-status vegetation alliances. Specifically, the Survey of California Vegetation and Mapping Standards (CDFW, 2020) specifies that the minimum mapping unit (MMU) is usually 1 or 2 acres, varying with the size of the project. Wetlands and other special vegetation types are mapped at ¼ acre, but many of the patches of elderberry shrubs onsite are well below the 0.25-acre threshold which is below both of the MMU standards identified.

Blue elderberry savannah (*Sambucus nigra* Shrubland Alliance) - Blue elderberry savannahs account for 2.56-acres in the central-portion of the Project Site east of Valencia Avenue. These areas have well below 50-percent cover of blue elderberry in the shrub overstory, occurring within areas dominated by upland mustard species and areas that include California brittlebush (*Encelia californica*) as an understory component. This alliance does not fit the membership requirement for the *Sambucas nigra* Shrubland Alliance described above.

Blue elderberry woodland (*Sambucus nigra* Shrubland Alliance) - Approximately 1.37 acres scattered throughout the eastern parcel of the Project Site consist of blue elderberry stands. In these areas, blue elderberry covers greater than 50-percent of the shrub overstory. Other species include Russian thistle, California sagebrush, southern California black walnut, laurel sumac, and pepper tree. Due to the dominance of blue elderberry, this vegetation type belongs to the *Sambucas nigra* Shrubland Alliance which has a G3 S3 rarity ranking. S3 alliances are defined as susceptible to becoming extirpated in the state, and may be, if additional populations are destroyed.

Walnut Grove Habitats

Southern California black walnut groves (*Juglans californica* Woodland Alliance) - On the northeastern edge of the Project Site, east of Valencia Avenue, approximately 0.07-acre consists of a southern California black walnut (*Juglans californica*) grove. This area matches the membership rule for the *Juglans californica* Woodland Alliance in the MCV II which requires greater than 50 percent relative cover of southern California black walnut in the tree canopy; however, the 0.07-acre area does not meet the minimum mapping unit as set forth in the CNDDB. Specifically, the Survey of California Vegetation and Mapping Standards (CDFW, 2020) specifies that the minimum mapping unit (MMU) is usually 1 or 2 acres, varying with the size of the project. Wetlands and other special vegetation types are mapped at ¼ acre, but the patch of walnut trees onsite encompasses well under the 0.25-acre minimum and is thus below the MMU standards identified[5]. . While the *Juglans californica* Woodland Alliance has a rarity ranking of G3 S3.2 given the limited size, would not be considered walnut grove as discussed in the impact section below. Also, as noted above, S3 ranked species are not yet susceptible to becoming extirpated in the state, and may be, if additional populations are destroyed. Other species occurring include California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*).

Riparian Habitats

Mule fat thickets (*Baccharis salicifolia* Shrubland Alliance) - Primarily in the ephemeral drainage west of Valencia Avenue, approximately 0.11-acre consists of mule fat (*Baccharis salicifolia*) thickets. According to the MCV II, these areas fit the *Baccharis salicifolia* Shrubland Alliance which has a rarity ranking of G5 S4 which is defined as secure within and outside of California. Other co-occurring species include non-native Spanish sunflower (*Pulicaria paludosa*) and Russian thistle.

Black Willow thickets (*Salix gooddingii* Woodland Alliance) - Approximately 0.03-acre near the northeastern boundary of the Site east of Valencia Avenue consists of two patches of black willow (*Salix gooddingii*) thickets. Due to the extent of black willow cover in the canopy, this vegetation type is best described as *Salix goodinggii* Woodland Alliance; however, the 0.03-acre area does not meet the minimum mapping unit as set forth in the CNDDB. Specifically, the Survey of California Vegetation and Mapping Standards (CDFW, 2020) specifies that the minimum mapping unit (MMU) is usually 1 or 2 acres, varying with the size of the project. Wetlands and other special vegetation types are mapped at ¼ acre, but the patch of black willow onsite encompasses well under the 0.25-acre minimum and is thus below the MMU standards identified[6].. This alliance has a G4 S3 rarity ranking which is defined as secure outside of California, and susceptible to becoming extirpated in the state, and may be, if additional populations are destroyed. Other dominating species in these areas include eucalyptus trees.

[5] California Department of Fish and Wildlife: Vegetation Classification and Mapping Program (VegCAMP). June 22, 2020. *Survey of California Vegetation Classification and Mapping Standards.*
[6] Ibid.

Non-native Grassland Habitats

Red brome or Mediterranean grass grasslands (*Bromus rubens-Schismus* (*arabicus, barbatus*) Semi-Natural Herbaceous Stands) - Approximately 16.36-acres throughout the Project Site are dominated by exotic, annual brome grasses. These areas most closely match the *Bromus rubens-Schismus* (*arabicus, barbatus*) Semi-Natural Herbaceous Stands vegetation description in the MCV II.

Ruderal Habitats

Upland mustards (*Brassica* (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands) - Disturbed areas dominated by invasive, non-native upland mustard species (*Hirschfeldia incana* and *Brassica nigra*) account for approximately 36.48-acres throughout the Project Site. These vegetation alliances belong to the *Brassica* (*nigra*) and Other Mustards Semi-Natural Herbaceous Stands classification in the MCV II.

Russian thistle stands (*Salsola tragus* Semi-Natural Herbaceous Stands) - Approximately 18.01-acres throughout the Project Site are dominated by Russian thistle, a non-native, invasive species. Other species occurring in these areas are upland mustards, yellow star-thistle, and exotic, annual grasses. This vegetation cover type does not have a close analog in the MCV II.

Filaree Fields - Filaree fields cover approximately 5.10-acres primarily in the portion of the Project Site west of Valencia Avenue. Some patches also occur in the southern portion of the Project Site east of Valencia Avenue, near the agricultural fields. These areas are dominated by long beaked filaree (*Erodium botrys*); however, red stemmed filaree (*Erodium cicutarium*) and white stemmed filaree (*Erodium moschatum*) also occur. None of the *Erodium* species are native to this area. This vegetation cover type does not have a close analog in the MCV II.

Poison hemlock or fennel patches (*Conium maculatum-Foeniculum vulgare* Semi-Natural Herbaceous Stands) - Poison hemlock (*Conium maculatum*), a non-native, invasive species, dominates several areas in the portion of the Project Site east of Valencia Avenue. These areas cover approximately 0.90-acres and match the *Conium maculatum-Foeniculum vulgare* Semi-Natural Herbaceous Stands description in the MCV II.

Castor bean thickets (*Ricinus communis* Semi-Natural Shrubland Alliance) - Castor bean (*Ricinus communis*) is a non-native, invasive species that was introduced and has naturalized in the wild. This species occurs on approximately a total of 0.85-acre scattered throughout the Project Site. This vegetation type does not have an analog in the MCV II.

Yellow star-thistle fields (*Centaurea* (*solstitialis, melitensis*) Semi-Natural Herbaceous Stands) - A patch of yellow star-thistle, a non-native, invasive species, covers approximately 0.30-acre on the eastern side Project Site west of Valencia Avenue. This stand includes tocalote (*Centaurea melitensis*) and matches the membership rule for the *Centaurea* (*solstitialis, melitensis*) Semi-Natural Herbaceous Stands classification in the MCV II.

Fountain grass swards (*Pennisetum setaceum* Semi-Natural Herbaceous Stands) - The northern portion of the Project Site east of Valencia Avenue contains an approximately 0.06-acre patch of fountain grass swards. This highly invasive non-native species was introduced ornamentally and has naturalized in the wild. According to the MCV II, this area fits the vegetation description for the *Pennisetum setaceum* Semi-Natural Herbaceous Stands classification.

Ornamental Habitats

Pepper tree groves (*Schinus* (*molle, terebinthifolius*) Semi-Natural Woodland Stands - Within the western and eastern parcels of the Project Site, approximately 8.05-acres consist of Brazilian pepper tree (*Schinus terebinthifolius*) and Peruvian pepper tree (*Schinus molle*) groves. These areas match the requirements for the *Schinus* (*molle, terebinthifolius*)-*Myoporum laetum* Semi-Natural Woodland Stands vegetation classification. The understory includes intermittently occurring laurel sumac and California sagebrush individuals along with non-native herbs and grasses.

Eucalyptus groves (*Eucalyptus* (*globulus, camaldulensis*) Semi-Natural Woodland Stands) - Approximately 6.86-acres, primarily in the central and northern areas of the Project Site east of Valencia Avenue, are dominated by non-native eucalyptus species that have naturalized in the environment. Within these areas, the herbaceous layer includes non-native grasses and forbs. The shrub strata include intermittently occurring laurel sumac (*Malosma laurina*) and coyote brush (*Baccharis pilularis*). According to the MCV II, this vegetation cover fits the following description: *Eucalyptus* (*globulus, camaldulensis*) Semi-Natural Woodland Stands.

Pepper tree or Laurel sumac groves (*Schinus* (*molle, terebinthifolius*)-*Malosma laurina* Semi-Natural Woodland Stands) - Approximately 3.13-acres in the Project Site east of Valencia Avenue contain groves dominated by Peruvian pepper tree and laurel sumac. These areas are considered disturbed, non-native vegetation communities; however, they have assimilations with the following two alliances in the MCV II: *Schinus* (*molle, terebinthifolius*)-*Myoporum laetum* Semi-Natural Woodland Stands and *Malosma laurina* Shrubland Alliance – Laurel Sumac Scrub (G4 S4).

Pepper tree individuals (*Schinus* (*molle, terebinthifolius*) Semi-Natural Woodland Stand) - Pepper tree individuals account for 1.83 acres in the western and eastern portions of the Project Site, collectively. Although these areas are not considered groves, they most closely match the following alliance in the MCV II: *Schinus* (*molle, terebinthifolius*)-*Myoporum laetum* Semi-Natural Woodland Stands.

Giant reed breaks (*Arundo donax* Semi-Natural Herbaceous Stands) - Giant reed (*Arundo* donax) is a non-native, invasive species. Near the northern boundary of the Project Site east of Valencia Avenue, approximately 0.17-acre of consists of a giant reed thicket. According to the membership rules in the MCV II, this area matches the *Arundo donax* Semi-Natural Shrubland Alliance. Surrounding habitat includes California sagebrush scrub.

Other Ornamental - In the northwest corner of the Project Site, east of Valencia Avenue, approximately 0.07-acre consists of escaped non-native ornamental species.

Mexican fan palm (*Washingtonia robusta* Semi-Natural Woodland Alliance) - Mexican fan palms (*Washingtonia robusta*) cover approximately 0.03-acre in both the western and eastern portions of the Project Site. This vegetation cover type is non-native and does not have a close analog in the MCV II.

Tree of Heaven Groves (*Ailanthus altissima* Semi-Natural Woodland Stands) - Tree of heaven (*Ailanthus altissima*) is a non-native, invasive species that was introduced and has naturalized in the wild. This species occurs on approximately 0.01 acre along East Lambert Road in the portion of the Project Site west of Valencia Avenue. This vegetation alliance does not have a close analog in the MCV II.

Developed/Disturbed

Oil Field Roads and Pads - Existing oilfield operations, including roads, paths, and infrastructure, account for approximately 83.52-acres throughout the Project Site.

Agriculture - Existing agriculture fields and operations account for approximately 27.71-acres. This area is located in the southern half of the portion of the Project Site East of Valencia Avenue.

Developed - Developed areas account for approximately 10.61-acres, primarily consisting of adjacent roads and structures throughout the Project Site.

Active Nursery - In the area west of Valencia Avenue and north of East Lambert Road, an active nursery accounts for approximately 4.61-acres.

Bare - Bare ground accounts for approximately 1.37-acres, primarily in the southern portion of the Project Site east of Valencia Avenue, adjacent to the agricultural operations.

Concrete Flood Control Channel - The concrete flood control channel is located between the agricultural areas in the southern portion of the Project Site east of Valencia Avenue. This channel accounts for approximately 0.16-acre.

GENERAL PLANT & WILDLIFE SPECIES

General plant species documented within the Project Site are presented in the previous section.

A total of 65, species, including reptiles, birds, and mammals were recorded from within the Project Site. Two species of reptiles were observed including the western fence lizard (*Sceloporus occidentalis*) and the side blotched lizard (*Uta stansburiana*). Mammal species observed and/or detected onsite include mule deer (*Odocoileus hemionus*), coyote (*Canius latrans*), brush rabbit (*Sylvilagus bachmani*), bobcat (*Lynx rufus*), dusky woodrat (*Neotoma fuscipes*), Mexican free-tailed bat (*Tadarida brasiliensis*), canyon bat (*Parastrellus hesperus*), and California ground squirrel (*Otospermophilus beecheyi*). Birds were the most commonly observed wildlife, with 57 species observed. These include the acorn woodpecker (*Melanerpes formicivorus*), Allen's hummingbird (*Selasphorus sasin*), American crow (*Corvus brachyrhynchos*), American kestrel (*Falco sparverius*), American pipit (*Anthus rubescens)*, Anna's

hummingbird (*Calypte anna*), ash-throated flycatcher (*Myiarchus cinerascens*), brown-headed cowbird (*Molothrus ater*), blue-gray gnatcatcher (*Polioptila caerulea*), barn swallow (*Hirundo rustica),* Bewick's wren (*Thryomanes bewickii*), black phoebe (*Sayornis nigricans*), black-headed grosbeak (*Pheucticus melanocephalus*), blue grosbeak (*Passerina caerulea*), bushtit (*Psaltriparus minimus*), Bullock's oriole (*Icterus bullockii*), California quail (*Callipepla californica*), California scrub-jay (*Aphelocoma californica*), California thrasher (*Toxostoma redivivum*), California towhee (*Melozone crissalis*), Canada goose (*Branta canadensis*), cliff swallow (*Hirundo pyrrhonota*), common raven (*Corvus corax*), common yellowthroat (*Geothlypis trichas*), European starling (*Sturnus vulgaris*), greater roadrunner (*Geococcyx californianus*), hooded oriole (*Icterus cucullatus*), house finch (*Carpodacus mexicanus*), house wren (*Troglodytes aedon*), killdeer (*Charadrius vociferus*), lesser goldfinch (*Carduelis psaltria*), northern mockingbird (*Mimus polyglottos*), Nuttall's woodpecker (*Picoides nuttallii*), mourning dove (*Zenaida macroura*), northern rough-winged swallow (*Stelgidopteryx serripennis*), olive-sided flycatcher (*Contopus cooperi*), orange-crowned warbler (*Oreothlypis celata*), pacific-slope flycatcher (*Empidonax difficilis*), phainopepla (*Phainopepla nitens*), red-tailed hawk (*Buteo jamaicensis*), Say's phoebe (*Sayornis saya*), song sparrow (*Melospiza melodia*), spotted towhee (*Pipilo maculatus*), turkey vulture (*Cathartes aura*), Vaux's swift (*Chaetura vauxi*), western bluebird (*Sialia mexicana*), western kingbird (*Tyrranis verticalis*), western meadowlark (*Sturnella neglecta*), whimbrel (*Numenius phaeopus*), white-crowned sparrow (*Zonotrichia leucophrys*), white-throated swift (*Aeronautes saxatalis*), Wilson's warbler (*Cardellina pusilla*), wrentit (*Chamaea fasciata*), yellow warbler (*Setophaga petechia*), and yellow-rumped warbler (*Setophaga coronata*).

A complete list of floral and faunal species documented onsite is included in Appendix A–Floral/Faunal Compendia.

JURISDICTIONAL RESOURCES

United States Army Corps of Engineers/Regional Water Quality Control Board

United States Army Corps of Engineer and RWQCB jurisdiction on the Project Site is associated with four ephemeral drainage features, one of which traverses the western portion of the Project Site and one which traverses the eastern portion of the site and are designated as the "Drainage A" and "Drainage B." Drainage B includes a small tributary "Drainage C". The southern portion of the Project Site includes a concrete channelized segment of Carbon Canyon Creek ("Drainage D") as summarized in Table 5, *USACE/RWQCB Jurisdictional Resources Acreages*, and shown in Figure 9, *USACE/RWQCB Jurisdictional Resources Map*.

Table 5. USACE/RWQCB Jurisdictional Resource Acreages

Drainage Feature	Type	Acres	Linear Feet
Drainage A	Non-Wetland Channel	0.363	2,422
Drainage B	Non-Wetland Ephemeral Channel	0.043	241
Drainage C	Non-Wetland Ephemeral Channel	0.086	1,149
Drainage D	Concrete Ephemeral Channel	0.159	687
	Total	**0.651**	**4,499**

Source: GLA 2022.

Drainage A

Drainage A, which accounts for 0.363 acre of non-wetland waters, originates on the portion of the site north of East Lambert Road, where an offsite drainage ditch discharges to the site, and extends eastward, where the channel enters a 48-inch concrete pipe and is carried beneath an oil field road, turning to the south. The drainage, at this point, is depicted as a blue-line drainage on the U.S. Geological Survey (USGS) topographic map Yorba Linda, California. For the segment north of East Lambert, the drainage varies from five to ten feet in width and the banks and channel support dense stands of non-native invasive castor bean (*Ricinus communis*, FACU), summer mustard (*Hirschfeldia incana*, UPL), with a few small patches of mulefat (*Baccharis salicifolia*, FAC). The OHWM was indicated by the presence of an incised channel with debris wrack and shelving, and terracing. The drainage crosses under Lambert Road through a 13-foot paved tunnel constructed for oil operations that allows trucks and other vehicles to travel under East Lambert Road. South of East Lambert Road, the channel ranges from three to 12 feet in width, exhibits a sand and cobble bottom and supports mostly non-native species including Russian thistle (*Salsola tragus*, FACU), Canada horseweed (*Conyza canadensis*, FACU), summer mustard (*Hirschfeldia incana*, UPL), Spanish sunflower (*Pulicaria paludosa*, FAC), and a few small patches of mulefat. For the drainage segment south of East Lambert Road, the OHWM was indicated by the presence of an incised channel with debris wrack and shelving, changes in the character of the soil, and terracing and in some areas clear lines impressed on the banks. This segment of Drainage A is crossed by numerous active and inactive oilfield pipes, many of which are buried.

The hydrology source for this drainage does not represent “ordinary” conditions as the watershed for the drainage includes the Olinda Landfill, which includes large detention basins that discharge episodically, once the basins reach capacity, resulting in stream flows much larger than under a condition of normal runoff, where the water enters the drainage courses gradually. Such episodic discharges, combined with the highly erodible soils has caused substantial down cutting and the need for historic armoring of portions of the drainage that include the use of buried cable, broken concrete and asphaltic material derived from historic oil operations.

Drainage B

Drainage B, which is located on the portion of the site east of Valencia Avenue, accounts for 0.043-acre of non-wetland, ephemeral waters. This drainage feature originates at the northern site boundary, where a 24-inch culvert discharges to the site beneath Carbon Canyon Road. This drainage feature is not depicted as a blue-line drainage on the USGS topographic map Yorba Linda, California. This drainage feature also includes a tributary, which is described below.

Drainage B exhibits an OHWM only intermittently and generally ranges from four to ten feet in width, where an OHWM is discernible as illustrated in Figure 9, *USACE/RWQCB Jurisdictional Resources Map*. Much of the flow associated with this drainage occurs as sheet flow that moves across flat areas in the canyon bottom that are not sufficiently concentrated to form a definable channel that exhibits characteristics associated with an OHWM. The drainage sheet flows where an OHWM is lacking and traverses areas with a canopy of blue-gum eucalyptus (*Eucalyptus globulus*, UPL), Peruvian pepper

(*Schinus mole*, UPL), laurel sumac (*Malosma laurina*, UPL), and areas with summer mustard (*Hirschfeldia incana*, UPL). Sheet flows associated with Drainage B ultimately discharge to Drainage C below which the OHWM is no longer evident.

As noted for Drainage A, Drainage B has been subject to historic armoring of portions of the drainage that include the use of broken concrete and asphaltic material derived from historic oil operations.

Drainage C

Drainage C is located on the portion of the site east of Valencia Avenue, and accounts for 0.086-acre of non-wetland, ephemeral waters. This drainage feature originates in the north-central portion of the site, where a culvert discharges to a ravine. This drainage feature is not depicted as a blue-line drainage on the USGS topographic map Yorba Linda, California. Drainage C ranges from two to four feet in width and traverses an area with a canopy of laurel sumac (*Malosma laurina*, UPL). The drainage becomes indistinct at an oilfield pad and road, and there is no OHWM discernible for approximately 610 feet with the drainage again discernible on the south side of an oilfield access road. From that point the drainage extends another 190 feet beneath a canopy of eucalyptus before discharging to a storm drain at the site boundary.

Drainage D

Drainage D is a channelized concrete segment of Carbon Canyon Creek that originates at the base of Carbon Canyon Dam, extending approximately 687 feet, across the property where it enters a concrete box that carries flows downstream. The RWQCB jurisdiction for this feature totals 0.159-acre.

California Department of Fish and Wildlife

California Department of Fish and Wildlife jurisdiction is associated with the four (4) drainage features described above and as summarized in Table 6, *CDFW Jurisdictional Resources Acreages*, below followed by site-specific descriptions, and shown in Figure 10, *CDFW Jurisdictional Resources Map*.

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Table 6.
CDFW Jurisdictional Resource Acreages

Drainage Feature	Non-Riparian Streambed	Riparian	Total Acres	Linear Feet
Drainage A	0.699	0.032	0.731	2,422
Drainage B	0.048	0.031	0.079	241
Drainage C	0.086	0.0	0.086	1,149
Drainage D	0.159	0.0	0.159	687
Total	**0.992**	**0.063**	**1.055**	**4,499**

Source: GLA 2022.

Figure 9 - USACE/RWQCB Jurisdictional Resources Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

Figure 10 - CDFW Jurisdictional Resources Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

Drainage A

Drainage A accounts for 0.699-acre of streambed plus an additional 0.032-acre of mulefat scrub. The channel originates on the portion of the site north of East Lambert Road, where a drainage ditch along the northern boundary of the Project site receives waters via offsite sheet flows and discharges to the site. This drainage is depicted as a blue-line drainage on the USGS topographic map Yorba Linda, California. For the segment north of East Lambert Road, the drainage varies from ten to twenty-two feet in width and the banks and channel support dense stands of non-native invasive castor bean (*Ricinus communis*) with a few small patches of mulefat (*Baccharis salicifolia*). The presence of a stream was indicated by an incised channel with debris wrack and shelving and terracing. The drainage crosses under Lambert through a 13-foot tunnel constructed for oil operations that allows trucks and other vehicles to travel under East Lambert Road. South of East Lambert Road, the channel ranges from six to seventeen feet in width, exhibits a sand and cobble bottom and supports mostly non-native species including Russian thistle (*Salsola tragus*), Spanish sunflower (*Pulicaria paludosa*), and a few small patches of mule fat.

Drainage B

Drainage B is located on the portion of the site east of Valencia Avenue and accounts for 0.048-acre of ephemeral waters of which includes a small patch willow accounting for 0.031-acre. This drainage feature originates at the northern site boundary, where a 24-inch culvert discharges to the site beneath Carbon Canyon Road. This drainage feature is not depicted as a blue-line drainage on the USGS topographic map Yorba Linda, California. This drainage feature also includes a tributary described below. Drainage B generally ranges from four to ten feet in width and only exhibits a bed, bank, and channel intermittently, traversing an area with a canopy of blue-gum eucalyptus (*Eucalyptus globulus*, UPL), Peruvian pepper (*Schinus molle*), laurel sumac, and areas with summer mustard (*Hirschfeldia incana*). The drainage terminates above the confluence with the Drainage C where the streambed is no longer evident.

Drainage C

The Drainage C is located on the portion of the site east of Valencia Avenue, and accounts for 0.086-acre of ephemeral waters with no riparian habitat. This drainage feature originates in the north-central portion of the site, where a culvert discharges to a ravine. This drainage feature is not depicted as a blue-line drainage on the USGS topographic map Yorba Linda, California. Drainage C ranges from two to five feet in width and traverses an area with a canopy of laurel sumac. The drainage becomes indistinct at an oilfield pad and road, and there is no OHWM discernible for approximately 610 feet with the drainage again discernible on the south side of an oilfield access road. From that point the drainage extends another 190 feet beneath a canopy of eucalyptus before discharging to a storm drain at the site boundary.

Drainage D

Drainage D is a channelized concrete segment of Carbon Canyon Creek that originates at the base of Carbon Canyon Dam, extending approximately 687 feet, across the

property where it enters a concrete box that carries flows downstream. CDFW jurisdiction for this feature totals 0.159-acre.

SENSITIVE BIOLOGICAL RESOURCES

The following discussion describes the plant and wildlife species present, or potentially present within the property boundaries, that have been afforded special recognition by federal, state, or local resource conservation agencies and organizations, principally due to the species' declining or limited population sizes, usually resulting from habitat loss. Also discussed are habitats that are unique, of relatively limited distribution, or of particular value to wildlife. Protected sensitive species are classified by state and/or federal resource management agencies, or both, as threatened or endangered, under provisions of the state and federal endangered species act. Vulnerable or "at-risk" species that are proposed for listing as threatened or endangered (and thereby for protected status) are categorized administratively as "candidates" by the USFWS. CDFW uses various terminology and classifications to describe vulnerable species. There are additional sensitive species classifications applicable in California. These are described below.

Sensitive biological resources are habitats or individual species that have special recognition by federal, state, or local conservation agencies and organizations as endangered, threatened, or rare. The CDFW, USFWS, and special groups like the CNPS maintain watch lists of such resources. For the purpose of this assessment sources used to determine the sensitive status of biological resources are:

Plants: USFWS (2019), CDFW (2019d), CNDDB (CDFW 2019a), CNPS (2019), and Skinner and Pavlik (1994),

Wildlife: California Wildlife Habitat Relationships (2008), USFWS (2019), CDFW (2019b, 2019e), and CNDDB (CDFW 2019a),

Habitats: CNDDB (CDFW 2019a).

FEDERAL PROTECTION AND CLASSIFICATIONS

The Federal Endangered Species Act of 1973 (FESA) defines an endangered species as "any species that is in danger of extinction throughout all or a significant portion of its range..." Threatened species are defined as "any species which 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 as follows in Section 3(18) of the 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 as forms of a "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. Recently, the USFWS instituted changes in the listing status of former candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing at this time) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. However, some USFWS field offices have issued memoranda stating that former C2 species are henceforth to be considered Federal Species of Concern. This term is employed in this document, but carries no official protections. 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 purposes of this assessment, the following acronyms are used for federal status species:

FE	Federal Endangered
FT	Federal Threatened
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
FC	Federal Candidate for Listing

When a species is listed under the FESA, USFWS must designate critical habitat for the species in most cases, unless there are specific reasons for not designating critical habitat (e.g., such designation poses risks for the subject species). Critical habitat designations by USFWS are intended to guide federal agency action, and critical habitat is defined in Section 3 of the FESA as:

> (1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the [FESA], on which [the USFWS believes] are found those physical or biological features
> (a) Essential to the conservation of the species and
> (b) Which may require special management considerations or protection; and
> (2) Specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination [by the USFWS] that such areas are essential for the conservation of the species.

The FESA is designed to provide a certain level of protection to USFWS designated critical habitat only in those instances in which a federal agency is considering whether to grant an authorization, fund or take any other federal agency action that may destroy or adversely modify the designated critical habitat. Section 7(a)(2) of FESA requires federal agencies to consult with USFWS (or National Marine Fisheries Service (NMFS), as applicable) on federal agency actions that have the potential to destroy or adversely modify critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. The designation does not place any restrictions on a non-federal agency landowner or on State or local agencies or governments; nor does the designation restrict a non-federal

agency landowner from removing or otherwise adversely modifying land containing the critical habitat designation. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by private landowners. Where a landowner seeks or requests Federal agency funding or authorization for an activity likely to negatively impact one or more members of a listed species or critical habitat, the consultation requirements of ESA Section 7(a)(2) generally apply.

Critical habitat designations are the USFWS's method of identifying for federal agencies (to the extent known using information available at the time of such designation) those physical or biological features ("PBFs") believed essential to the conservation of the species (such as space, food, cover, and protected habitat), focusing on the principal biological or physical constituent elements (formerly designated as primary constituent elements) within an area considered essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type). Primary constituent elements (PCE's), now referred to as PBFs are the elements of physical or biological features which, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, the USFWS believes to be essential to the conservation of the species. Critical habitat designations are intended as a tool to be used by the USFWS in helping federal agencies comply with their obligations under Section 7 of the FESA.

Migratory birds including resident raptors and passerines are protected under the federal CDFG Code Section 3503.

The Bald Eagle and Golden Eagle Protection Act explicitly protects the bald eagle and golden eagle and imposes its own prohibition on any taking of these species. As defined in this act, take means to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb. Current USFWS policy is not to refer the incidental take of bald eagles for prosecution under the Bald Eagle and Golden Eagle Protection Act (16 U.S.C. 668-668d).

STATE PROTECTION AND CLASSIFICATIONS

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 FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of CESA addresses the taking of threatened or endangered 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 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 memorandums of understanding...” and can be authorized for “...endangered species, threatened species, or candidate species for scientific, educational, or management purposes.” Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. SSC (“special” animals and plants) listings include special status species, including all state and federal protected and candidate taxa. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For the purposes of this assessment, the following acronyms are used for State status species:

SE	State Endangered
ST	State Threatened
SCE	State Candidate Endangered
SCT	State Candidate Threatened
SFP	State Fully Protected
SP	State Protected
SR	State Rare
SSC	California Species of Special Concern
CWL	California Watch List

Nesting birds, including raptors, are protected under California Fish and Game Code Section 3503, which reads, “It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.” In addition, under California Fish and Game Code Section 3503.5, “it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto”. Passerines and non-passerine land birds are further protected under California Fish and Game Code 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or

indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW.

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in the State. This organization has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of rare, threatened, or endangered vascular plant species of California (Tibor 2001). The list serves as the candidate list for listing as threatened and endangered by CDFW. The CNPS has developed six (6) categories of rarity (CRPR):

CRPR 1A	Presumed extinct in California.
CRPR 1B	Rare, threatened, or endangered in California and elsewhere.
CRPR 2A	Plants presumed extirpated in California but common elsewhere
CRPR 2B	Plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3	Plants about which we need more information – a review list.
CRPR 4	Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat.

As stated by the CNPS:

> "*Threat Rank is an extension added onto the California Rare Plant Rank and designates the level of endangerment by a 1 to 3 ranking with 1 being the most endangered and 3 being the least endangered. A Threat Rank is present for all California Rare Plant Rank 1B's, 2's, 4's, and the majority of California Rare Plant Rank 3's. California Rare Plant Rank 4 plants are seldom assigned a Threat Rank of 0.1, as they generally have large enough populations to not have significant threats to their continued existence in California; however, certain conditions exist to make the plant a species of concern and hence be assigned a California Rare Plant Rank. In addition, all California Rare Plant Rank 1A (presumed extinct in California), and some California Rare Plant Rank 3 (need more information) plants, which lack threat information, do not have a Threat Rank extension." (CNPS 2010)*

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

The CNDDB provides global and state rankings for species and communities based on a system developed by The Nature Conservancy to measure rarity of a species. The ranking provides a shorthand formula regarding the rarity of a species or community

and is based on the best information available from multiple sources, including state and federal listings, and other groups that recognize species as sensitive (e.g., Bureau of Land Management, Audubon Society, etc.). State and global rankings are used to prioritize conservation and protection efforts so that the rarest species/communities receive immediate attention. In both cases, the lower ranking (i.e., G1 or S1) indicates extreme rarity. Rare species are given a ranking from 1 to 3. Species with a ranking of 4 or 5 has been determined to be common. If the exact global/state ranking is undetermined, a range is generally provided. For example, a global ranking of "G1G3" indicates that a species/community global rarity is between G1 and G3. A ranking with "?" such as S4? indicates that that the ranking is considered provisional and more information is required. If the animal being considered is a subspecies of a broader species, a "T" ranking is attached to the global ranking. The following are descriptions of global and state rankings:

Global Rankings

- G1 – Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or because of some factor(s) making it especially vulnerable to extinction.
- G2 – Imperiled globally because of rarity (6-20 occurrences), or because of some other factor(s) making it very vulnerable to extinction throughout its range.
- G3 – Either very rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g., a physiographic region), or because of some other factor(s) making it vulnerable to extinction throughout its range.
- G4 – Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- G5 – Common, widespread and abundant.

State Rankings

- S1 – Extremely rare; five or fewer viable occurrences in the state; or less than 1,000 individuals; or less than 1,280 acres; and may be especially vulnerable to extirpation.
- S2 – Very rare; between 6 and 20 viable occurrences; or less than 3,000 individuals, or between 1,280 and 6,400 acres and may be susceptible to becoming extirpated.
- S3 – Rare to uncommon; 21 to 100 viable occurrences; or 3,000 to 10,000 individuals, or between 6,400 and 32,000 acres; S3 ranked species are not yet susceptible to becoming extirpated in the state but may be if additional populations are destroyed.
- S4 - Uncommon but not rare; some cause for long-term concern due to declines or other factors.
- S5 - Common, widespread, and abundant in the state.

The Native Plant Protection Act (NPPA) enacted a process by which plants are listed as rare or endangered. The NPPA regulates collection, transport, and commerce in plants that are listed. The CESA follows the NPPA and covers both plants and wildlife

determined to be threatened with extinction or endangered. Plants listed as rare under the NPPA are designated as threated under the CESA.

STATE AND FEDERAL TAKE AUTHORIZATION 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.

SENSITIVE HABITATS

The CNDDB identifies the following ten (10) special-status vegetation alliances/communities for Yorba Linda, San Dimas, Ontario, Prado Dam, Black Star Canyon, Orange, Anaheim, La Habra, and Baldwin Park quadrangle maps:

1. California Walnut Woodland
2. Riversidean Alluvial Fan Sage Scrub
3. Southern California Arroyo Chub/Santa Ana Sucker Stream
4. Southern Coast Live Oak Riparian Forest
5. Southern Cottonwood Willow Riparian Forest
6. Southern Interior Cypress Forest
7. Southern Riparian Scrub
8. Southern Sycamore Alder Riparian Woodland
9. Southern Willow Scrub
10. Walnut Forest

The Project Site contains the following special-status vegetation alliances/communities:

1. Southern California Black Walnut Woodland

2. Blue Elderberry Stands (not listed in CNDDB for the subject quads)
3. Goodding's Black Willow Forest (not listed in CNDDB for the subject quads)
4. Coast Prickly Pear (not listed in CNDDB for the subject quads)

The location(s) for each of these habitats is provided on Figure 3, *Vegetation Communities Map* and acreages tabulated in Table 4, *Vegetation Community Acreages*.

SENSITIVE PLANTS

The following special-status plant was detected within the Project Site: Southern California black walnut, a CRPR List 4.2 taxon.

Southern California Black Walnut (*Juglans californica*)

This species is not Federal or State listed as threatened or endangered; however, it is on the California Rare Plant Rank List 4.2 meaning that the species is of limited distribution throughout its range in California. The approximate number of southern California black walnut trees documented within the Project Site is 126. These individuals are scattered throughout the northern half of the eastern Project Site in relatively disturbed areas among eucalyptus trees, pepper trees, and laurel sumac shrubs as shown in Figure 11, *Sensitive Floral Species Observation Map*.

No other special-status plants were detected within the Project Site (GLA 2022).

Table 7, *Sensitive Plant Species with Potential to Occur Onsite*, provides a list of special-status plants evaluated for the Project Site through general biological surveys, habitat assessments, and focused surveys. 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 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 Project Site.

Table 7.
Sensitive Plant Species with Potential to Occur Onsite.

Species Name Scientific Name	Status	Habitat Requirements	Potential for Occurrence
Allen's pentachaeta *Pentachaeta aurea* ssp. *allenii*	Federal: None State: None CRPR: List 1B.1	Openings in coastal sage scrub and valley and foothill grassland. Blooming period Mar-Jun. Elevation range 75-520m.	Does not occur
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CRPR: List 1B.1	Coastal dunes and coastal sage scrub. Blooming period Mar-Jun. Elevation range 1-400m.	Does not occur
Braunton's milkvetch *Astragalus brauntonii*	Federal: FE State: None CRPR: List 1B.1	Chaparral, coastal scrub, and valley and foothill grassland in recently burns or disturbed areas. Usually occurs in sandstone with carbonate layers.	Potential to occur

Species Name Scientific Name	Status	Habitat Requirements	Potential for Occurrence
Brewer's calandrinia *Calandrinia breweri*	Federal: None State: None CRPR: List 4.2	Chaparral, Coastal scrub. Blooming period (Jan)Mar-Jun.	Does not occur
California androsace *Androsace elongata ssp. acuta*	Federal: None State: None CRPR: List 4.2	Chaparral, Cismontane woodland, Coastal scrub, Meadows and seeps, Pinyon and juniper woodland, Valley and foothill grassland. Blooming period Mar-Jun	Does not occur
California beardtongue *Penstemon californicus*	Federal: None State: None CRPR: List 1B.2	Chaparral, lower montane coniferous forest, pinyon and juniper woodland/sandy. Blooming period May-Jun (Aug). Elevation range 1170-2300m.	Does not occur
California muhly *Muhlenbergia californica*	Federal: None State: None CRPR: List 4.3	Chaparral, Coastal scrub, Lower montane coniferous forest, Meadows and seeps. Blooming period Jun-Sep.	Does not occur
California saw-grass *Cladium californicum*	Federal: None State: None CRPR: List 2B.2	Meadows and seeps, Marshes and swamps Alkaline or Freshwater. Blooming period Jun-Sep.	Does not occur
Catalina mariposa lily *Calochortus catalinae*	Federal: None State: None CRPR: List 4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Blooming period (Feb) Mar-Jun.	Potential to occur but not detected
Chaparral nolina *Nolina cismontana*	Federal: None State: None CRPR: List 1B.2	Chaparral, coastal scrub (sandstone or gabbro).	Potential to occur but not detected
Chaparral ragwort Senecio aphanactis	Federal: None State: None CRPR: List 2B.2	Chaparral, Cismontane woodland, Coastal scrub. Blooming period Jan-Apr (May).	Does not occur
Chaparral sand verbena *Abronia villosa* var. *aurita*	Federal: None State: None CRPR: List 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur
Coulter's goldfields *Lasthenia glabrate ssp. coulteri*	Federal: None State: None CRPR: List 1B.1	Playas, vernal pools, marshes and swamps (coastal salt). Blooming period Feb-Jun. Elevation range 1-1220m.	Does not occur
Coulter's matilija poppy *Romneya coulteri*	Federal: None State: None CRPR: List 4.2	Chaparral, Coastal scrub. Blooming period Mar-Jul (Aug).	Potential to occur but not detected
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CRPR: List 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Does not occur
Davidson's saltscale *Atriplex serenana var. davidsonii*	Federal: None State: None CRPR: List 1B.2	Coastal bluff scrub, Coastal scrub. Blooming period Apr-Oct.	Does not occur

Species Name Scientific Name	Status	Habitat Requirements	Potential for Occurrence
Engelmann oak *Quercus engelmannii*	Federal: None State: None CRPR: List 4.2	Chaparral, Cismontane woodland, Riparian woodland, Valley and foothill grassland. Blooming period Mar-Jun	Does not occur
Fish's milkwort *Polygala cornuta var. fishiae*	Federal: None State: None CRPR: List 4.3	Chaparral, Cismontane woodland, Riparian woodland. Blooming period May-Aug	Does not occur
Gambel's water cress *Nasturtium gambelii*	Federal: FE State: ST CRPR: List 1B.1	Freshwater or brackish marches and swamps. Blooming period Apr-Oct. Elevation range 5-330m.	Does not occur
Heart-leaved pitcher sage *Lepechinia cardiophylla*	Federal: None State: None CRPR: List 1B.2	Closed-cone coniferous forest, chaparral, and cismontane woodland. Occurring on gabbroic, metavolcanic, or serpentinite soils. Blooming period Apr-Jul. Elevation range 520-1370m.	Does not occur
Hubby's phacelia *Phacelia hubbyi*	Federal: None State: None CRPR: List 4.2	Chaparral, Coastal scrub, Valley and foothill grassland. Blooming period Apr-Jul	Potential to occur but not detected
Intermediate mariposa lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CRPR: List 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur
Intermediate monardella *Monardella hypoleuca ssp. intermedia*	Federal: None State: None CRPR: List 1B.3	Chaparral, Cismontane woodland, Lower montane coniferous forest (sometimes). Blooming period Apr-Sep.	Does not occur
Jokerst's monardella *Monardella australis ssp. jokerstii*	Federal: None State: None CRPR: List 1B.1	Chaparral, Lower montane coniferous forest. Blooming period Jul-Sep.	Does not occur
Lewis' evening-primrose *Camissoniopsis lewisii*	Federal: None State: None CRPR: List 3	Coastal bluff scrub, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland. Blooming period Mar-May (Jun).	Does not occur
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CRPR: List 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands. Blooming period Apr-Jul. Elevation range 30-1530m.	Does not occur
Lucky morning-glory *Calystegia felix*	Federal: None State: None CRPR: List 1B.1	Meadows and seeps (sometimes alkaline), Riparian scrub (alluvial). Blooming period Mar-Sep	Does not occur

Species Name Scientific Name	Status	Habitat Requirements	Potential for Occurrence
Malibu baccharis *Baccharis malibuensis*	Federal: None State: None CRPR: List 1B.1	Chaparral, cismontane woodland, coastal sage scrub, riparian woodland. Blooming period August. Elevation range 150-305m.	Does not occur
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CRPR: List 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Does not occur
Mesa horkelia *Horkelia cuneata ssp. puberula*	Federal: None State: None CRPR: List 1B.1	Chaparral, cismontane woodland, and coastal scrub. Occurring on sandy or gravelly soils. Blooming period Feb-Jul (Sept). Elevation range 70-810m.	Does not occur
Ocellated Humboldt lily *Lilium humboldtii ssp. ocellatum*	Federal: None State: None CRPR: List 4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland. Blooming period Mar-Jul (Aug)	Does not occur
Palmer's grapplinghook *Harpagonella palmeri*	Federal: None State: None CRPR: List 4.2	Chaparral, Coastal scrub, Valley and foothill grassland. Blooming period Mar-May.	Does not occur
Paniculate tarplant *Deinandra paniculata*	Federal: None State: None CRPR: List 4.2	Coastal scrub, Valley and foothill grassland, Vernal pools. Blooming period (Mar)Apr-Nov	Potential to occur but not detected
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CRPR: List 1B.1	Chenopod scrub, playas, vernal pools. Blooming period Jun-Oct. Elevation range 25-1900m.	Does not occur
Parry's spineflower *Chorizanthe parryi var. parryi*	Federal: None State: None CRPR: List 1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Blooming period Apr-Jun	Does not occur
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: CSC CRPR: List 4.2	Found in coastal sage scrub and chaparral habitats. In Orange County the species is known to occur in the Chino-Puente Hills.	Does not occur
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CRPR: List 1B.1	Coastal sage scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools. Occurring on mesic soils. Blooming period Apr-Jul. Elevation range 15-700m.	Does not occur
Rigid fringe pod *Thysanocarpus rigidus*	Federal: None State: None CRPR: List 1B.2	Pinyon and juniper woodland. Dry rocky slopes. Blooming period Feb-May.	Does not occur
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CRPR: List 1B.2	Chaparral, coastal sage scrub. Blooming period Jan-Jul. Elevation range 1-885m.	Potential to occur but not detected

Species Name Scientific Name	Status	Habitat Requirements	Potential for Occurrence
Salt spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CRPR: List 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CRPR: List 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic)/near ditches, streams, and springs. Blooming period Jul-Nov. Elevation range 2-2040m.	Does not occur
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	Federal: Candidate State: SE CRPR: List 1B.1	Coastal sage scrub, valley and foothill grassland. Occurring on sandy soils. Blooming period Apr-Jul. Elevation range 150-1220m.	Does not occur
Santa Ana River woolly star *Eriastrum densifolium* ssp. *sanctorum*	Federal: FE State: SE CRPR: List 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Does not occur
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CRPR: List 1B.1	Sandy soils in alluvial fan coastal scrub, chaparral, cismontane woodland. Blooming period Apr-Jun. Elevation range 200-760m.	Does not occur
Small-flowered morning-glory *Convolvulus simulans*	Federal: None State: None CRPR: List 4.2	Chaparral (openings), Coastal scrub, Valley and foothill grassland. Blooming period Mar-Jul	Does not occur
Smooth tarplant *Centromadia pungens ssp. laevis*	Federal: None State: None CRPR: List 1B.1	Chenopod scrub, meadows and seeps, playas, Riparian woodland, valley and foothill grassland. Blooming period Apr-Sep	Does not occur
South coast branching phacelia *Phacelia ramosissima var. austrolitoralis*	Federal: None State: None CRPR: List 3.2	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps (coastal salt). Blooming period Mar-Aug	Does not occur
Southern California black walnut *Juglans californica*	Federal: None State: None CRPR: List 4.2	Occurs in grasslands, floodplains and sage scrub/chaparral habitats. The Chino Hills are an important distributional center for this species.	126 individuals Observed on site including 0.07 Southern California black walnut grove
Southern tarplant *Centromadia parryi* ssp. *australis*	Federal: None State: None CRPR: List 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Does not occur
Tecate cypress *Hesperocyparis forbesii*	Federal: None State: None CRPR: List 1B.1	Occurs in clayey or alkali substrates, usually in grasslands or in alkali meadow habitats.	Does not occur

Species Name Scientific Name	Status	Habitat Requirements	Potential for Occurrence
Vernal barley *Hordeum intercedens*	Federal: None State: None CRPR: List 3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland (saline flats and depressions), Vernal pools. Blooming period Mar-Jun	Does not occur
Western spleenwort *Asplenium vespertinum*	Federal: None State: None CRPR: List 4.2	Chaparral, Cismontane woodland, Coastal scrub. Blooming period Feb-Jun.	Does not occur
White rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CRPR: List 2B.2	Chaparral, cismontane woodland, coastal scrub, and riparian woodland in sandy and gravelly soils. Blooming period (Jul)Aug-Nov (Dec). Elevation range 0-2100m.	Does not occur
Woolly chaparral-pea *Pickeringia montana var. tomentosa*	Federal: None State: None CRPR: List 4.3	Chaparral. Blooming period May-Aug	Does not occur

California Native Plant Society (CNPS): California Rare Plant Rank (CRPR)
CRPR 1A – plants presumed extinct in California
CRPR 1B – plants rare, threatened, or endangered in California, but more common elsewhere
CRPR 2A – plants presumed extirpated in California but common elsewhere
CRPR 2B – plants rare, threatened, or endangered in California but more common elsewhere
CRPR 3 – plants about which we need more information, a review list
CRPR 4 – plants of limited distribution, a watch list
.1 – Seriously endangered in California
.2 – Fairly endangered in California
.3 – Not very endangered in California

Federal (USFWS) Protection and Classification
FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate for Listing

State (CDFW) Protection and Classification
SE – State Endangered
ST – State Threatened

Occurrence
- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present = The species was detected onsite incidentally or through focused surveys

Source: GLA 2022.

Figure 11 - Sensitive Floral Species Observations Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

SENSITIVE WILDLIFE

The following five (5) special-status animals were detected at the Project Site:

Coastal California Gnatcatcher (*Polioptila californica californica*)

Two breeding pairs of coastal California gnatcatchers (Federally threatened, State species of special concern (SSC)) were detected onsite during focused survey efforts as shown in Figure 12, *Sensitive Faunal Species Observation Map*. One (1) pair was associated with a 0.26-acre patch of California sagebrush in the central-western portion of the Project Site east of Valencia Avenue. This was the same area where a breeding pair was detected during 2017 protocol surveys. A second breeding pair was detected on a knoll approximately 750 feet northeast of the first pair in California sagebrush. During the 2017 survey a single gnatcatcher was observed in this area. The Project Site contains approximately 10.33-acres of suitable coastal scrub habitat within the close proximity to the coastal California gnatcatcher observations.

Least Bell's Vireo (*Vireo bellii pusillus*)

During protocol gnatcatcher surveys in 2018 an early-season migrant least Bell's vireos (LBV) passing through the survey area as shown in Figure 12, *Sensitive Faunal Species Observation Map*. This bird is a State- and federally listed endangered species. It occurs in dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest, which does not occur on the site. Detections were of single birds and observation locations were not repeated during the early season observations, with one exception. The exception was a repeated observation of a single bird located in a eucalyptus woodland located south of the active oil field and north of the active agricultural area. Based on the timing of the LBV observations (late May to early June) it was most likely an unpaired male. The location is vegetated with a canopy of eucalyptus trees and understory of sparse mulefat, blue elderberry, and poison oak. During crotch bumblebee surveys on April 11th, 2020 migrating LBV were detected in eucalyptus on the project site and a single LBV was detected during subsequent surveys singing in elderberry immediately adjacent to the location where LBV was observed in 2018.

Yellow Warbler (*Setophaga petechia*)

A yellow warbler (state species of special concern) was documented foraging on the Project Site near the southwest corner of the parcel east of Valencia Avenue, as shown in Figure 12, *Sensitive Faunal Species Observation Map*. This species is a migratory songbird that breeds in riparian habitats in southern California. The yellow warbler exhibits habitat requirements similar to the yellow-breasted chat and least Bell's vireo. Suitable habitat typically consists of multi-layered riparian scrub or willow woodland corridors along flowing streams.

California horned lark (*Eremophila alpestris actia*)

The California horned lark is a CDFW Watch List species. The California horned lark breeds and resides in the coastal region of California from Sonoma County southeast to the United States/Mexican border, including most of the San Joaquin Valley, and

eastward to the foothills of the Sierra Nevada (Grinnell and Miller 1944; AOU 1998). The California horned lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent (Zeiner, *et al*. 1990). Range-wide, California horned larks breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats (Grinnell and Miller 1944). The California horned lark was observed foraging within the grassland portions of the Project.

Cooper's Hawk (*Accipiter cooperii*)

Cooper's hawk is a CDFW Watch List species when nesting. This species occurs in riparian areas and oak woodlands, and most commonly in montane canyons. This species is also known to use urban areas, occupying mature trees associated with residential and commercial development and using utility poles as perches. Cooper's hawk was observed foraging within the Project Site and the mature Eucalyptus trees represent suitable nesting habitat.

Table 8, *Sensitive Wildlife Species with Potential to Occur Onsite,* provides a list of special-status animals evaluated for the Project Site through general biological surveys, habitat assessments, and focused surveys. Species were evaluated based on the following factors, including: 1) species identified by the CNDDB as occurring (either currently or historically) on or in 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 Project Site.

Table 8.
Sensitive Wildlife Species with Potential to Occur Onsite

Species Name	Status	Habitat Requirements	Potential for Occurrence
American badger *Taxidea taxus*	Federal: None State: None CDFW: SSC	Occurs drier shrub, forest, and herbaceous habitats. Needs open, uncultivated ground and friable soils for digging burrows. Preys on burrowing rodents.	Not expected to occur
American peregrine falcon *Falco peregrinus anatum*	Federal: None State: None CDFW: FP	Wetlands near cliffs, coastal areas and inland mountains.	Not expected to occur
Arroyo chub *Gila orcuttii*	Federal: None State: None CDFW: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	No potential to occur on site
Bald eagle *Haliaeetus leucocephalus*	Federal: None State: SE CDFW: FP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	No potential to occur on site
Bank swallow *Riparia riparia*	Federal: None State: ST CDFW: None	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine textured	No potential to occur on site

Species Name	Status	Habitat Requirements	Potential for Occurrence
		sandy soils near streams, rivers, lakes, or ocean in order to dig nesting holes.	
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: None CDFW: SSC	Occurs in low-lying arid areas in Southern California. Roosts in high cliffs or rocky outcrops.	Not expected to occur – not detected during focused surveys
Burrowing owl *Athene cunicularia*	Federal: None State: None CDFW: 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.	Absent. Not observed on site during focused surveys.
California black rail *Laterallus jamaicensis coturniculus*	Federal: None State: ST CDFW: FP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	No potential to occur on site due to lack of suitable habitat
California diplectronan caddisfly *Diplectrona californica*	Federal: None State: None CDFW: None	Larvae live in fast-flowing, cool streams.	No potential to occur on site due to lack of suitable habitat
California glossy snake *Arizona elegans occidentalis*	Federal: None State: None CDFW: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Not expected to occur
California horned lark *Eremophila alpestris actia*	Federal: None State: None CDFW: WL	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Detected onsite.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: None CDFW: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Not expected to occur
Coast horned Lizard *Phrynosoma blainvillii*	Federal: None State: None CDFW: SSC	Chaparral and coastal sage scrub	Moderate potential to occur on site. Not observed.
Coast Range newt *Taricha torosa*	Federal: None State: None CDFW: SSC	Wet forests, oak forests, chaparral, and rolling grasslands.	No potential to occur on site
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	Federal: BBC State: None CDFW: SSC	Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.	Limited potential to occur on site. Not observed during focused surveys.
Coastal California gnatcatcher *Polioptila californica californica*	Federal: FT State: None CDFW: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Observed breeding on site.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	Federal: None State: None CDFW: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Potential to occur on site. Not observed.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Cooper's hawk *Accipiter cooperii*	Federal: None State: None CDFW: WL	Primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons. Known to use urban areas, occupying trees among residential and commercial.	Detected onsite.
Golden eagle *Aquila chrysaetos*	Federal: BCC State: None CDFW: FP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Not expected to occur – not observed during surveys
Grasshopper sparrow *Ammodramus savannarum*	Federal: None State: None CDFW: SSC	Occurs in dense grasslands on rolling hills, lowland plains, in valleys, and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs, and scattered shrubs. Loosely colonial when nesting.	Not expected to occur – not observed during surveys
Great blue heron *Ardea herodias*	Federal: None State: None CDFW: None	Saltwater and freshwater habitats, from open coasts, marshes, sloughs, riverbanks, and lakes to backyards. Forages in grasslands and agricultural fields. Nests in trees or high places.	Potential to occur for occasional foraging
Hoary bat *Lasiurus cinereus*	Federal: None State: None CDFW: None	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Potential to occur. Not detected during focused bat surveys
Least Bell's vireo *Vireo bellii pusillus*	Federal: FE State: SE CDFW: None	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Observed migrating through site. Low potential for breeding due to marginal habitat quality.
Long-eared owl *Asio otus*	Federal: None State: None CDFW: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Not expected to occur
Merlin *Falco columbarius*	Federal: None State: None CDFW: WL	Nest in forested openings, edges, and along rivers. Winter in open forests, grasslands, and especially coastal areas with flocks of small songbirds or shorebirds.	Not expected to occur – would only occur as wintering or migrant

Species Name	Status	Habitat Requirements	Potential for Occurrence
Northern leopard frog *Lithobates pipiens*	Federal: None State: None CDFW: SSC	Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, reservoirs. Generally, prefers permanent water with abundant aquatic vegetation.	No potential to occur on site
Northwestern San Diego pocket mouse *Chaetodipus fallax fallax*	Federal: None State: None CDFW: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Not expected to occur
Orange-throated whiptail *Aspidoscelis hyperythra*	Federal: None State: None CDFW: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Potential to occur on site
Pallid Bat *Antrozous pallidus*	Federal: None State: None CDFW: SSC	Habitats with rocky, outcropped areas.	Potential to occur for foraging. Not detected during surveys.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: None CDFW: SSC	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Not expected to occur - not detected during surveys.
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: None CDFW: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Potential to occur on site - not detected during surveys.
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: None CDFW: SSC	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Not expected to occur due to lack of suitable habitat
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: None CDFW: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Not expected to occur – not observed during surveys
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: None CDFW: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Not expected to occur
San Diego fairy shrimp *Branchinecta sandiegonensis*	Federal: FE State: None CDFW: None	Seasonal vernal pools	No potential to occur on site

Species Name	Status	Habitat Requirements	Potential for Occurrence
Santa Ana sucker *Catostomus santaanae*	Federal: FT State: None CDFW: None	Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.	No potential to occur on site
Southern California legless lizard *Anniella stebbinsi*	Federal: None State: None CDFW: SSC	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats that any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans	No potential to occur on site
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	Federal: None State: None CDFW: WL	Grass covered hillsides, coastal sage scrub, and chaparral.	Low potential to occur on site. Not detected during surveys.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE CDFW: None	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Not expected to occur
Swainson's hawk *Buteo swainsoni*	Federal: None State: ST CDFW: None	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.	Not expected to occur
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: BCC State: candidate CDFW: SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	No potential to occur on site
Two-striped gartersnake *Thamnophis hammondii*	Federal: None State: None CDFW: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	No potential to occur on site
Western mastiff bat *Eumops perotis californicus*	Federal: None State: None CDFW: SSC	Prefers habitat edges and mosaics with trees that are protected from above and open from below with open areas for foraging. Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests.	Potential to occur on site. Not detected during surveys.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Western pond turtle *Actinemys marmorata*	Federal: None State: None CDFW: 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. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	No potential to occur on site
Western yellow bat *Lasiurus xanthinus*	Federal: None State: None CDFW: 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 on site. Not detected during surveys.
Western spadefoot *Spea hammondii*	Federal: None State: None CDFW: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Not expected to occur due to lack of suitable habitat
Western yellow-billed cuckoo (nesting) *Coccyzus americanus occidentalis*	Federal: FT State: SE CDFW: None	Dense, wide riparian woodlands with well-developed understories.	No potential to occur on site
White tailed kite *Elanus leucurus*	Federal: None State: None CDFW: FP	Breeds in riparian trees in lower elevation areas. Known from San Diego north to San Luis Obispo Counties.	Low potential to occur on site for foraging – not observed during surveys
Yellow rail *Coturnicops noveboracensis*	Federal: None State: None CDFW: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	No potential to occur on site
Yellow-breasted chat *Icteria virens*	Federal: None State: None CDFW: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Potential to occur on site. Not detected during surveys.
Yellow warbler *Setophaga petechia*	Federal: BCC State: None CDFW: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Observed foraging on site.
Yuma myotis *Myotis yumanensis*	Federal: None State: None CDFW: None	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	Not expected to occur due to lack of suitable foraging habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Federal (USFWS) Protection and Classification FE – Federally Endangered FC – Federal Candidate for Listing **State (CDFW) Protection and Classification** SE – State Endangered SPE – State Proposed Endangered SSC – State Species of Special Concern CWL – California Watch List SFP – State Fully Protected **Western Bat Working Group (WBWG)** H – High Priority LM – Low-Medium Priority M – Medium Priority MH – Medium-High Priority **Occurrence** • Absent – The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused surveys has confirmed the absence of the species. • Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out. • Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed. • Present – The species was detected onsite incidentally or through focused surveys.			

Source: GLA 2022.

The following special status wildlife species were not detected onsite but have the potential to occur within or adjacent to the Project Site.

Coast horned lizard (*Phrynosoma blainvillii*)

The coast horned lizard is designated as a CDFW SSC, but is not Federally or State listed. This species inhabits coastal sage scrub and chaparral habitats with sandy, rocky, or shallow soils that support native harvester ants (*Pogonomyrmex* spp.).

The coast horned lizard was not observed during many hours of surveys but has limited potential to occur on site on portions of the Project Site east of Valencia Avenue within areas of coastal sage scrub.

Coastal whiptail (*Aspidoscelis tigris stejnegeri*)

The coastal western whiptail does not have a Federal or State designation, however this species is considered locally rare. The western whiptail ranges through the semi-arid and arid desert lowlands of Southern California, southern Arizona, adjacent areas of Mexico and western Baja California, Mexico (Lowe, *et al*., 1970). It is the third most common lizard in the San Gabriel Mountains after *Sceloporus occidentalis* and *Uta stansburiana* (Schoenherr, 1976). The western whiptail can be found in open, often rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations (Benes, 1969). *Cnemidophorus* [*Aspidoscelis*] is commonly found on the eastern and western slopes of the San Gabriel Mountains in all habitats except yellow pine forest (Schoenherr, 1976). Schoenherr (1976) also indicates that the western

whiptail probably occurs in oak woodland (although none have been taken in this habitat type) because they have been detected in riparian areas.

The coastal whiptail is known to occur in the general vicinity of the Project Site. This species has low potential to occur on site within the proposed development area and a moderate to high potential to occur in avoided scrub areas west, north and east of the development areas.

Orange-throated Whiptail (*Aspidoscelis hyperythra*)

The orange-throated whiptail is a CDFW SSC. This lizard is known from coastal sage scrub, chaparral, and valley-foothill hardwood habitats of San Bernardino, Riverside, Los Angeles, Orange and San Diego counties. It prefers washes and other sandy areas with patches of brush and rocks. This species has a low potential to occur within the Project Site.

Red-diamond rattlesnake (*Crotalus ruber*)

The northern red-diamond rattlesnake is designated as a CDFW SSC but is not Federally or State listed. This species occurs in chaparral, woodland, grassland, and desert areas from San Bernardino County southward along both sides of the Peninsular ranges and Santa Ana mountains to Baja California. This species uses rocks, rodent burrows, and dense vegetation for cover. The northern red-diamond rattlesnake was not detected during surveys and has low potential to occur on the site.

Burrowing Owl (*Athene cunicularia)*

Focused surveys for the burrowing owl, a CDFW SSC, were conducted within all suitable habitat areas within the Project Site. Surveys were conducted in accordance with survey guidelines described in the 2012 CDFG Staff Report on Burrowing Owl Mitigation. The species depends on the presence of ground squirrels whose burrows are used for nesting and roosting. The burrowing owl prefers primarily open areas with short vegetation and bare ground. Portions of the Site west of Valencia Avenue exhibit disturbed, sparse vegetation, providing habitat relatively suitable for the species. However, the protocol surveys did not detect this species, which does not occur on the Site.

Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*)

The coastal cactus wren is a CDFW SSC. It is a resident species in arid regions in Southern California and has restricted habitat requirements in stands of cholla and prickly pear. This species was not detected during focused surveys in 2017 or 2018 and does not occur on the site.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)

The southern California rufous-crowned sparrow is a CDFW Watch List species. This subspecies of the rufous-crowned sparrow is a resident species of southern California on the slopes of the Transverse and Coastal ranges from Los Angeles County south to Baja California Norte, and occurs on grass-covered hillsides, coastal sage scrub, and

chaparral. Southern California rufous-crowned sparrow was not detected during surveys in 2017 or 2018 and does not occur on the site.

White tailed kite (*Elanus leucurus*)

The white-tailed kite is designated as a California Fully Protected Species. In California, the white-tailed kite is a common to uncommon, year-long resident in coastal and valley lowlands; rarely found away from agricultural areas (Grinnell and Miller 1944). It inhabits herbaceous and open stages of most habitats mostly in cismontane California. It has extended its range and increased numbers in California in recent decades (Eisenmann 1971).

Although apparently a resident bird throughout most of its breeding range, dispersal occurs during the nonbreeding season resulting in some range expansion during the winter. It is believed to become nomadic during low abundance of California voles and the population changes in a regular and predictable fashion directly tied to changing vole numbers. The white-tailed kite inhabits low elevation, open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Riparian areas adjacent to open areas are used for nesting (Dunk 1995). The winter habitat is generally similar to the breeding habitat, but the proximity to nest trees is not important.

The white-tailed kite has been reported historically in the general vicinity of the Project site. The Project site including development areas provide suitable foraging habitat. The white-tailed kite may potentially nest to the west and/or east of the Project Site boundary.

Yellow-Breasted Chat (*Icteria virens*)

The yellow-breasted chat, which is a CDFW SSC, is a migratory songbird that breeds in riparian habitats in southern California. This species exhibits habitat requirements similar to the least Bell's vireo. Suitable habitat typically consists of multi-layered riparian scrub or willow woodland corridors along flowing streams. This species does not have potential to nest on site; however, it has a low potential to foraging onsite.

Special Status Bats

GLA conducted focused surveys for roosting and foraging special-status bats. Species detected acoustically foraging or flying over the site included the Mexican free-tailed bat (*Tadarida brasiliensis*) and canyon bat (*Parastrellus hesperus*). Additionally, one recording of an unidentified bat species in the 40 kilohertz frequency was detected. While the site supports numerous blue-gum eucalyptus trees, which are often used by certain bat species for roosting (within areas of exfoliating bark), roosting on site was not detected. Specifically, careful examination of the eucalyptus trees found very few large trees with areas of exfoliating bark that would be suitable for roosting.

CRITICAL HABITAT

A 141.40-acre portion of the Project Site located east of Valencia Avenue is included in Critical Habitat Unit 9 for the coastal California gnatcatcher as depicted in Figure 12, *Sensitive Faunal Species Observation Map*. The area designated as Critical Habitat

consists of active oil field that supports a predominance of non-native trees including blue gum eucalyptus and Peruvian pepper mixed with laurel sumac chaparral, and limited areas of coastal sage scrub as quantified below. The site also contains substantial areas historically devoted to oil production activities including unvegetated roads and pads. The portion of the site designated as Critical Habitat is bordered on the north by existing residential development, Valencia Avenue and former nursery lands to the west that support non-native grasses and forbs as well as residential and institutional lands to the west of Valencia Avenue. Areas to the south of the Critical habitat include active agricultural areas (some of which (11.10-acres) are included in the Critical Habitat overlay) and residential development. To the east is Carbon Canyon Regional Park and lands owned by the USACE associated with Carbon Canyon Dam which support very limited areas of coastal sage scrub habitat. Given these factors, the most suitable areas for east to west and west to east movement by the California gnatcatcher would be to the north of the Project Site within existing and proposed open space, mitigation bank, and mitigation/restoration sites as depicted Figure 13, *Regional Open Space and Proposed Mitigation Lands Map*. Specifically, areas to the east include Critical Habitat connecting with areas occupied by the California gnatcatcher which extend to the west to Chino Hills State Park and the Shell/Aera Habitat Conservation Plan (HCP) Study Management Area which connects areas of Critical Habitat to the north with areas of conserved open space in the Tonner Hills area, which in turn provide connections to areas to the west occupied by the California gnatcatcher.

The definition for Physical and Biological Features, PBFs (formerly PCEs as reflected below)[7] as provided in the 2007 Final Rule for California gnatcatcher Critical Habitat are defined as follows:

> *(2) The primary constituent elements (PCEs)*[PBFs] *of critical habitat for coastal California gnatcatcher are:(i) Dynamic and successional sage scrub habitats: Venturan coastal sage scrub, Diegan coastal sage scrub, Riversidean sage scrub, maritime succulent scrub, Riversidean alluvial fan scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub in Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties that provide space for individual and population growth, normal behavior, breeding, reproduction, nesting, dispersal and foraging; and (ii) Non-sage scrub habitats such as chaparral, grassland, riparian areas, in proximity to sage scrub habitats as described for PCE 1 above that provide space for dispersal, foraging, and nesting. (3) Critical habitat does not include manmade structures (such as buildings, aqueducts, airports, roads, and other paved areas) and the land on which they are located existing on the effective date of this rule and not containing one or more of the PCEs.*

Table 9, *Coastal California Gnatcatcher PBF's Assessment,* below provides a summary of areas within the 141.40-acre area of designated Critical Habitat, which includes a 1.40-acre triangular parcel that abuts the intersection of Valencia Avenue and Rose

[7] As noted, the designation of "Primary Constituent Elements" has been changed to "Physical and Biological Features"; in the new critical habitat regulations (81 FR 7214) however, given that the 2007 Final Rule for the California gnatcatcher uses "PCEs" such usage is noted and retained here and has also been retained in the quotation from the 2007 Final Rule.

Drive and an additional 0.06-acre offsite to the north that is just west of Valencia Avenue. The Critical Habitat overlay includes 83.98 acres that do not constitute PCEs [PBFs] and 57.42 acres with PCEs [PBFs]. Thus, of the 141.40 acres of Critical Habitat, 83.98 acres do not constitute PCEs [PBFs] (59.0-percent). For areas with PCEs 13.18-acres consist of fragmented coastal sage scrub (PCE [PBF](i)) and 24.84 acres dominated by non-native upland mustards (PCE [PBF](ii)). Thus, of the 141.40 acres of Critical Habitat, only 13.18 acres (9.3-percent) provide potential breeding habitat while 24.84 acres (17.6 percent) are comprised of non-native mustards, which provide areas for foraging and movement only, and as noted, given the location of the site, does not represent important habitat for regional east-west and west-east movement, which is concentrated to the north. Laurel sumac scrub, accounting for 16.75-acres, while native, is not suitable for breeding and is of limited value for movement and foraging. It is also important to note that of the 13.18-acres of areas with vegetation cover (coastal sage scrub alliances) consistent with PCE[PBF](i), only limited areas of CSS were observed to be occupied by the coastal California gnatcatcher, which during two 2017 and 2018 protocol surveys utilized the central portion of the area of the site east of Valencia Avenue as depicted on Figure 12, *Sensitive Faunal Species Observation Map*. Thus, areas of CSS along the northern boundary of the site, overlooking Carbon Canyon Road as well as other small, isolated patches do not appear to be utilized by the California gnatcatcher based on survey results, due to small patch size and sub-optimal structure of adjacent vegetation. Specifically, many of the patches of sagebrush scrub are embedded in a matrix of vegetation cover that the coastal California gnatcatcher would be expected to avoid such as eucalyptus and pepper groves.

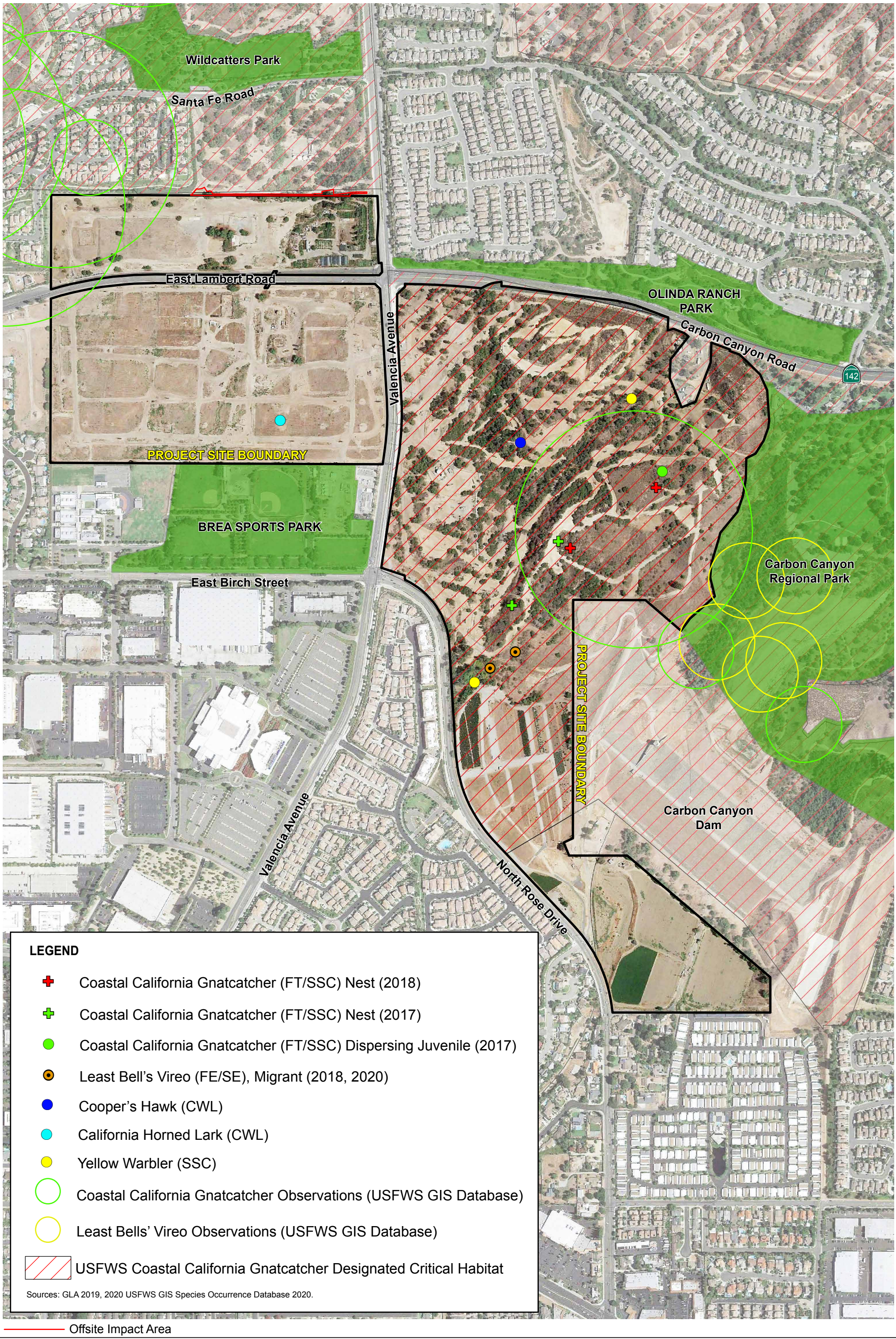

Figure 12 - Sensitive Faunal Species Observations Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

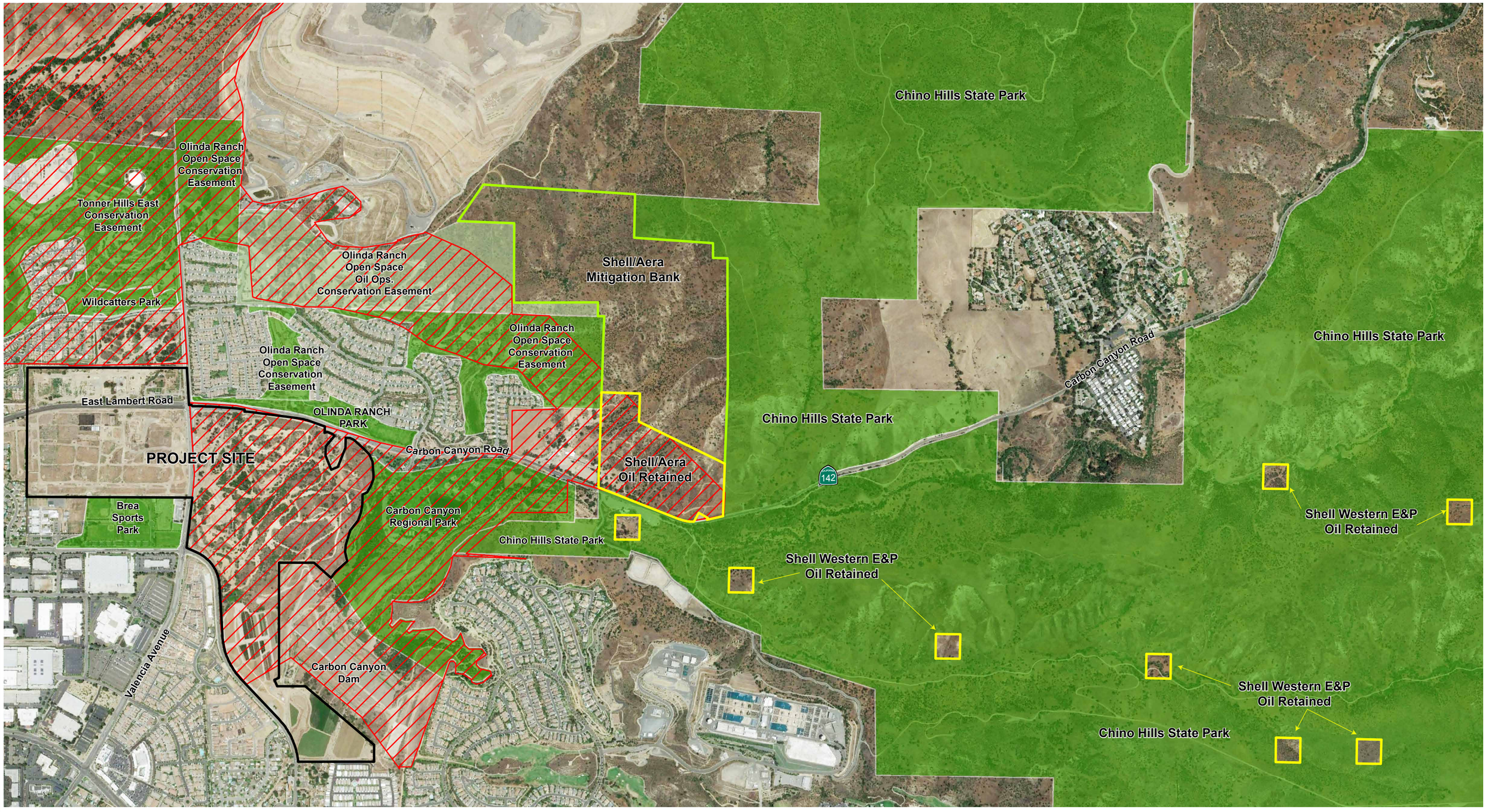

Figure 13 - Regional Open Space and Proposed Mitigation Lands Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 1,300 feet

Table 9.
Coastal California Gnatcatcher PBF's Assessment

Project Site Primary Constituent Elements within Critical Habitat	
Upland mustards	24.84
Laurel sumac scrub	16.75
California sagebrush scrub	9.85
California buckwheat scrub	2.94
Blue elderberry (savannah)	2.56
Coyote brush scrub	0.23
Coast prickly pear scrub	0.11
Annual brome grassland	0.07
California brittle bush scrub	0.05
Mule fat thickets	0.02
Subtotal	**57.42**
Project Site <u>Not</u> Primary Constituent Elements within Critical Habitat	
Oilfield Roads and Pads	46.70
Agriculture	11.10
Pepper tree grove	6.88
Eucalyptus (groves)	6.58
Pepper/Laurel sumac (groves)	3.13
Developed	2.93
Blue elderberry (individuals)	1.54
Blue elderberry (woodland)	1.37
Pepper tree	1.19
Poison hemlock patches	0.90
Castor bean thickets	0.37
Filaree fields	0.28
Russian thistle stands	0.26
Yellow star thistle fields	0.24
Bare	0.20
Giant reed thickets	0.10
California walnut (groves)	0.07
Fountain grass swards	0.06
Other ornamental	0.04
Black willow thickets	0.03
Mexican fan palm	0.01
Subtotal	**83.98**
TOTAL	**141.40**

Source: GLA 2022.

REGIONAL CONNECTIVITY/WILDLIFE MOVEMENT CORRIDORS

Overview

Wildlife corridors link areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallager 1989; Bennett 1990). Corridors effectively act as links between different populations of a species. A group of smaller populations (termed "demes") linked together via a system of corridors is termed a "metapopulation." The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population's genetic variability is generally associated with an increase in a population's health. Corridors mitigate the effects of habitat fragmentation by:

(1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity;
(2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and
(3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983; Fahrig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as "wildlife corridor", "travel route", "habitat linkage", and "wildlife crossing" to refer to areas in which wildlife moves from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel Route: A landscape feature (such as a ridge line, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relatively direct link between target habitat areas.

Wildlife Corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species.

Wildlife Crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often "choke points" along a movement corridor.

Wildlife Movement Within and Adjacent to Project Site

The Project Site is located west of Carbon Canyon Regional Park, Chino Hills State Park and south of the Puente-Chino Hills wildlife corridor. The Puente-Chino Hills wildlife corridor extends from near the Whittier Narrows Recreation Area southeast through and toward Chino Hills State Park, Coal Canyon, Irvine Ranch Land Reserve and the Cleveland National Forest. During a detailed meta-analysis of corridor function for the Puente-Chino Hills wildlife corridor conducted by Conservation Biology Institute, the Project Site was not identified as a potential corridor segment (CBI 2005). Specifically, the Project Site is located immediately west of the Chino Corridor Segment 1 (Carbon Canyon Regional Park). As stated by CBI:

> "*Segment 1 is largely conserved already as Chino Hills State Park, although efforts continue to increase the size and buffering of this important reserve area. It is separated from Segment 2 by Carbon Canyon Road (Highway 142). This busy 2-lane road suffers some roadkill, especially coyote (Robertson et al. 1995), but is generally quite permeable to target species due to extensive, naturally vegetated land on both sides, lack of development over much of its length, and availability of several undercrossings*." (CBI 2005)"

The Project Site was also not identified as a habitat linkage contributing to Chino Hills State Park. As stated in the Chino Hills State Park General Plan:

> "*The habitat linkages important to the biological survival of Chino Hills State Park are: 1) Coal Canyon which links the park to the Cleveland National Forest and the Santa Ana Mountains; 2) the Sonome Canyon Area which links Chino Hills State Park to Tonner Canyon and other open space to the northwest; and 3) the Prado Basin area that links the park to the Prado Basin, and thereby to the Dairy Preserve, the Santa Ana River watershed, and open space east of State Route 71*." (Chino Hills State Park General Plan 1999)

The majority of the Project Site is characterized as an active oil operation site operated by Aera Energy LLC since the early 1900s. The Project Site is bordered to the north, south and east by high density residential development and bisected north to east by Valencia Avenue and west to east by East Lambert/Carbon Canyon Roads. The Project Site on the east side of Valencia Avenue consists of land associated with oil operations including oil fields, roads and paths, and related equipment and infrastructure (disturbed, undeveloped land occurs scattered within the oilfield operations), and active agricultural cultivation. The areas west of Valencia Avenue includes active and abandoned nursery facilities while still containing active oil operations. The Project Site is bordered to the east by Carbon Canyon Regional Park. Based on the extent of adjacent high-density residential development along the north, south and west boundaries and associated high traffic roadways bisecting and bordering the property, the Project Site does not meet the definition or is expected to serve as a wildlife movement corridor for ground dwelling species.

However, the Project Site is located partially within USFWS designated critical habitat for the federally threated coastal California gnatcatcher. As previously analyzed and presented, a total of 57.42 acres of critical habitat representing PCEs [PBFs] were documented onsite, as outlined in Table 9, *Coastal California Gnatcatcher PCE Assessment*. Specifically, 13.18 acres provide potential breeding habitat and foraging (coastal sage scrub habitat associations) while 24.91 acres are comprised of non-native mustards and annual non-native grassland, which provide areas for foraging and movement. Laurel sumac scrub, blue elderberry savannah and mule fat thickets while not suitable for breeding, do provide suitable foraging habitat and material for nest building when in close association with suitable breeding sites.

Impacts to 52.86 acres of USFWS coastal California gnatcatcher critical habitat with PCE's [PBFs] will be mitigated by preserving a total 52.86 acres of open space habitat within and immediately adjacent to the existing Puente-Chino Hills wildlife corridor. The proposed preserved lands will include 22.50 acres of in-holdings (SWEPI Retained Drill Sites) within the Chino Hills State Park and Shell/Aera oil retained lands located within the coastal California gnatcatcher critical habitat boundary and within which a minimum of 20.66 acres of coastal sage scrub restoration will occur, as shown in Figure 13, *Regional Open Space and Proposed Mitigation Lands Map*. The proposed land conservation would also provide a significant contribution to a region of open space adjacent to Carbon Canyon Road identified as a "Priority Crossing Improvement Area - A" (CBI 2005). As stated by CBI:

> "*Add wildlife fencing on either side of Carbon Canyon Road to reduce roadkill and encourage wildlife to use existing culverts, especially the concrete box culvert near the entrance to Chino Hills State Park. Adding another wildlife crossing structure, designed to accommodate all large mammals, would be even better. Given that traffic on this 2-lane road is increasing due to increasing development in the vicinity (Haas 2000), any future road upgrades should incorporate bridges or other very open wildlife crossing structures as mitigation. A variety of smaller under-crossings with funneling fences, specifically designed to accommodate smaller reptiles, amphibians, and mammals, should also be considered to improve connectivity for these species*." (CBI 2005)

The dedication of 52.86 acres of open space lands located within and adjacent to Chino Hills State park within the Puente-Chino Hills wildlife corridor, coastal California gnatcatcher critical habitat, and priority crossing improvement area would represent a significant acquisition and contribution to regional wildlife movement conservation goals. The proposed conserved lands will be offered to the Chino Hills State Park for consideration of acquisition.

REGIONAL AND REGULATORY SETTING

The following section has been based on Local, City General Plan conditions, compliance with City of Brea Municipal Codes and complying with State and Federal regulatory resources guidelines.

LOCAL

Chino Hills State Park General Plan

As stated in the Chino Hills State Park General Plan:

> **"***When evaluating the desirability of proposed land acquisitions at the park, the Department will consider the following guidelines: 1) The Department will evaluate each proposal of land dedication and accept only those dedications that are in keeping with the purposes of Chino Hills State Park. Land acquisitions will support the park's resource management goals by enhancing watershed protection and adding significant or unique resources, habitats, or features to the park. They will create buffer areas (areas between developments and park resources) and include ridgelines whenever possible, increase the size and improve the effectiveness of biocorridors, and establish park facilities outside of sensitive resource areas. Land acquisitions may also add to the park's recreational opportunities and establish links to regional trail systems. 2) The Department must exercise caution when considering land adjacent to developed areas. Difficulties arise from illegal-refuse dumping, illegal off-highway vehicle activity, the spread of exotic plant species onto parkland, and wildlife predation and harassment by domestic animals., 3) The Department will actively work towards acquisition of properties that contribute to biocorridors ensuring that key linkages will be preserved, and 4) In order to accomplish mutual goals such as resource protection, biocorridor enhancement, and providing recreational opportunities, partnerships with local and regional jurisdictions as well as state and federal agencies will be encouraged*." (Chino Hills State Park General Plan 1999)

The proposed 52.86-acres of conserved lands will be offered to the Chino Hills State Park for consideration of acquisition. The lands are expected to meet and/or exceed the standards for acquisition based on the following facts.

- 22.50 acres of proposed conservation lands are located within in-holdings (8 SWEPI Retained Drill Sites) within the Chino Hills State Park boundary.

- 35.32 acres of proposed conservation lands are located immediately west of Chino Hills State Park boundary, south of the Shell/Aera Mitigation Bank and immediately north of the Chino Hills State Park Interpretive Center.

- No residential development is located adjacent to any of the proposed conservation areas.

- The proposed conservation areas would contribute to connectivity of open space within the Puente-Chino Hills wildlife corridor and provide additional buffer habitat west of the existing Chino Hills State Park boundary.

City of Brea General Plan

Preserve Open Space Aggressively for Diverse Purposes – as a Visual and Scenic Resource, for Habitat Conservation, to Protect Watersheds, and for Recreation

Policy CR-4.1 Protect and preserve open space wherever possible.

The dedication of 52.86-acres of open space lands located within and adjacent to Chino Hills State park within the Puente-Chino Hills wildlife corridor, coastal California gnatcatcher critical habitat, and priority crossing improvement area would represent a significant acquisition and contribution to regional wildlife movement conservation goals. The proposed conserved lands will be offered to the Chino Hills State Park for consideration of acquisition.

Policy CR-4.2 Select areas for open space preservation using an evaluation system that incorporates the following selection criteria: connectivity, access/recreations, sensitive areas, natural features, subdivision pattern, and buffer zones.

The dedication of 52.86-acres of open space lands located within and adjacent to Chino Hills State park within the Puente-Chino Hills wildlife corridor, coastal California gnatcatcher critical habitat, and priority crossing improvement area would represent a significant acquisition and contribution to regional wildlife movement conservation goals. The proposed conserved lands will be offered to the Chino Hills State Park for consideration of acquisition.

Policy CR-4.3 Work aggressively with the Orange County, Los Angeles County, State, and other appropriate public agencies, private entities, and landowners to conserve, protect, and enhance open spaces and natural resources, particularly within the sphere of influence

The proposed conserved lands will be offered to the Chino Hills State Park for consideration of acquisition.

Preserve and Maintain Wildlife and Animal Movement Corridors

Policy CR-8.1 Preserve key wildlife migration corridors and habitat areas.

Based on the extent of adjacent high-density residential development along the north, south and west boundaries and associated high traffic roadways bisecting and bordering the property, the Project Site does not meet the definition or is expected to serve as a wildlife movement corridor for ground dwelling species. However, the Project Site is located partially within USFWS designated critical habitat for the federally threated coastal California gnatcatcher. A total of 52.86-acres of critical habitat representing PBFs will be impacted onsite, as outlined in Table 11, *Impacts to CAGN Critical Habitat PBF's*. The dedication of 52.86-acres of open space lands located within the Puente-Chino Hills wildlife corridor, coastal California gnatcatcher critical habitat, priority crossing improvement area, and within which 20.66-acres of coastal sage scrub establishment and/or restoration is proposed would represent a significant acquisition and contribution to regional wildlife movement conservation goals. The proposed conserved lands will be offered to the Chino Hills State Park for consideration of acquisition.

Policy CR-8.2 Provide adequate wildlife crossings where roadways have severed habitat areas.

the Project Site does not meet the definition or is expected to serve as a wildlife movement corridor for ground dwelling species and no wildlife crossings are proposed along Valencia Avenue, East Lambert or Carbon Canyon Road.

Policy CR-8.3 Cooperate with regional agencies and authorities with similar goals in protecting and enhancing wildlife and animal movement corridors.

The Wildlife Corridor Conservation Authority (WCCA), a local joint power authority organization will review the project to ensure compliance with conservation, environmental protection and maintenance of the habitat and wildlife corridor within the Puente-Chino Hills.

Policy CR-8.4 Regular monitoring of medium and large mammals is necessary to gauge the effectiveness of wildlife corridors and to identify or increases in wildlife populations.

the Project Site does not meet the definition or is expected to serve as a wildlife movement corridor for ground dwelling species and no medium or large mammal monitoring is proposed.

Preserve and Maintain Open Space, Natural Habitat, and Vegetation Communities that Support Wildlife Species and Animals.

Policy CR-9.1 Support regional and sub-regional efforts to acquire, develop, operate, and maintain an open space system extending from the Puente Hills to the Chino Hills.

The dedication of 52.86 acres of open space lands located within and adjacent to Chino Hills State park within the Puente-Chino Hills wildlife corridor, coastal California gnatcatcher critical habitat, and priority crossing improvement area would represent a significant acquisition and contribution to regional wildlife movement conservation goals. The proposed conserved lands will be offered to the Chino Hills State Park for consideration of acquisition.

Policy CR-9.2 Preserve the integrity of blue line streams and riparian habitat areas.

Impacts to USACE, RWQCB and CDFW resources would be reduced to less than significant following implementation of **BIO-MM 1** (USACE/CDFW/RWQCB).

Policy CR-9.3 Preserve and restore the habitat value of creek corridors though the preservation of native plants and the replacement of invasive, non-native plants with native plants.

Impacts to USACE, RWQCB and CDFW resources would be reduced to less than significant following implementation of **BIO-MM 1** (USACE/CDFW/RWQCB).

Policy CR-9.4 Protect sensitive plant species resources from the impacts of development.

The project does not conflict with the policies set forth in the Brea 265 Specific Plan that has been prepared for the project, which supersedes and replaces the City of Brea local policies and/or ordinances (City of Brea Hillside Residence (HR) Guidelines) following implementation of **BIO-MM1** to **BIO-MM5**.

Policy CR-9.5 Manage areas of diverse wildlife habitat as a natural resource and prevent major destruction or disruption.

The proposed 52.86-acres of conserved lands will be offered to the Chino Hills State Park for consideration, acquisition and long-term management. The lands are expected to meet and/or exceed the standards for acquisition.

Policy CR-9.6 Use specific management programs using sound ecological principles and professionally accepted methods are necessary to protect and restore sensitive animal populations and their habitats.

All proposed restoration and monitoring activities will be based on City of Brea, USFWS, CDFW and RWQCB review and approval as outlined in **BIO-MM 1** (USACE/CDFW/RWQCB).

The project does not conflict with the policies set forth in the Brea 265 Specific Plan that has been prepared for the project, which supersedes and replaces the City of Brea local policies and/or ordinances (City of Brea Hillside Residence (HR) Guidelines).

City of Brea Municipal Code (Ord. 1079, passed 11-2-04)

The City of Brea's Municipal Code identifies land use categories, development standards, and other general provisions that ensure consistency between the County and City General Plans and proposed development projects. Appendix G of the 2019 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) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project does not conflict with the policies set forth in the Brea 265 Specific Plan that has been prepared for the project, which supersedes and replaces the City of Brea local policies and/or ordinances (City of Brea Hillside Residence (HR) Guidelines) following implementation of **BIO-MM1** to **BIO-MM5**.

FEDERAL

United States Army Corps of Engineers Jurisdictional Waters

Pursuant to Section 404 of the Clean Water Act, the USACE 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 USACE 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.

In the absence of wetlands, the limits of USACE 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 USACE published a manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology 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 methodology 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[8]);
- 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 criterion with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

The proposed project will impact resources regulated by the USACE and a CWA Section 404 permit will be required.

STATE

Regional Water Quality Control Board Jurisdictional Resources

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States[9] and

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

[9] Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code or Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (USACE) to be “waters of the U.S.” in an approved jurisdictional determination; “waters of the U.S.” identified in an aquatic resource report verified by the USACE upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of “waters of the U.S.” or any current or historic federal regulation defining “waters of the U.S.” under the federal Clean Water Act.

waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[10] *and*
3. *Artificial wetlands*[11] *that meet any of the following criteria:*

    a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
    b. Specifically identified in a water quality control plan as a wetland or other water of the state;
    c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
    d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):
        i. Industrial or municipal wastewater treatment or disposal,
        ii. Settling of sediment,

[10] "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.
[11] Artificial wetlands are wetlands that result from human activity.

iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering,
vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,
x. Treatment, storage, or distribution of recycled water, or
xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.[12]

All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.

The proposed project will impact resources regulated by the USACE and a 401 certification with the RWQCB will be required.

California Department of Fish and Wildlife Jurisdictional Resources

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.

The Fish and Game Code 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 also defines a stream as “a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.”

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related

[12] Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board’s authority to issue or waive waste discharge requirements or take other actions as applicable.

ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

A 1602 Streambed Alteration Agreement (SAA) will be required from the CDFW for impacts to jurisdictional resources.

ENVIRONMENTAL IMPACTS

The following sections include an analysis of the direct impacts, indirect impacts, and cumulative effects of the proposed action on sensitive and/or regulated biological resources. This analysis characterizes the project related activities that are anticipated to adversely impact the species or regulated resources, and when feasible, quantifies such impacts. Direct effects are defined as actions that may cause an immediate effect on the species or its habitat, and/or regulated resource including the effects of interrelated actions and interdependent actions. 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 effects are caused by or result from the proposed actions, are later in time, and are reasonably certain to occur. Indirect effects may occur outside of the area directly affected by the proposed action. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other offsite 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 invasive species, 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 incremental, individual environmental effects of two or more projects when considered together. These impacts taken individually may be minor but may be collectively significant. Cumulative effects include future tribal, local, or private actions that are reasonably certain to occur in the proposal vicinity considered in this report. A cumulative impact to biological resources may occur if a project has the potential to collectively degrade the quality of the environment, substantially reduce the habitat of wildlife species or cause a population to drop below self-sustaining levels,

thereby threatening to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species.

THRESHOLD OF SIGNIFICANCE

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 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.

The environmental impacts relative to biological resources are assessed using impact significance criteria which mirror the policy statement contained in the CEQA at Section 21001 (c) of the Public Resources Code. This section reflects that the legislature has established it to be the policy of the state to:

> "*Prevent the elimination of fish and 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*…"

The following definitions apply to the significance criteria for biological resources:

- "*Endangered*" means that the species is listed as endangered under state or federal law.

- "*Threatened*" means that the species is listed as threatened under state or federal law.

- "*Rare*" means that the species exists in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens.
- "*Region*" refers to the area within southern California that is within the range of the individual species.

- "*Sensitive habitat*" refers to habitat for plants and animals (1) which plays a special role in perpetuating species utilizing the habitat on the property, and (2) without which there would be substantial danger that the population of that species would drop below self-perpetuating levels.

- "*Substantial effect*" means significance loss or harm of a magnitude which, based on current scientific data and knowledge, (1) would cause a species or a native plant or animal community to drop below self-perpetuating levels on a statewide or regional basis or (2) would cause a species to become threatened or endangered.

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, ..."*

Impacts to biological resources may result in a significant adverse impact if one or more of the following conditions would result from implementation of the proposed project. Would the project:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS? Less than significant with mitigation.
- 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 CDFW or USFWS? Less than significant.
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? Less than significant with mitigation.
- 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? Less than significant with mitigation.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? No Impact.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? The Project Site is not located within or adjacent to an existing or proposed Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) including the NCCP/HCP Central and Coastal Subregion of Orange County. No Impact.

Also, the determination of impacts has been made according to the federal definition of "*take*". FESA prohibits the "*taking*" of a member of an endangered or threatened wildlife species or removing, damaging, or destroying a listed plant species by any person

(including private individuals and private or government entities). FESA defines "*take*" as "*to harass, harm, pursue, hunt, shoot, would, kill, trap, capture or collect*" an endangered or threatened species, or to attempt to engage in these activities.

DIRECT IMPACTS

Vegetation Communities

A total of 255.34-acres of onsite/offsite vegetation communities (grading/fuel modification zones (FMZ) will be directly and permanently impacted as a result of project implementation as summarized in Table 10, *Vegetation Community Impacts,* and illustrated on Figure 14*, Vegetation Communities Impact Map*.

The project will impact the following special-status vegetation alliances: Black willow thickets, Coast prickly pear scrub, and blue elderberry stands.

Sensitive Vegetation Communities

California Walnut Groves

The project will not impact walnut groves through grading or fuel modification. Walnut groves have a state rarity ranking of S3. CDFW considers impacts to alliances of S3 to be significant; however, avoidance of walnut groves would reduce potential impacts to less-than-significant and mitigation would be not required

Black Willow Thickets

The project will impact 0.03-acre of black willow thickets, which are fully surrounded by a matrix of upland mustards, eucalyptus groves and non-native Mexican fan palms and thus do not exhibit functions typically associated with black willow forest. Black willow thickets have a state rarity ranking of S3; however, impacts to a single patch of black willow covering 0.03-acre surrounded by non-native vegetation would not be considered significant and would not require mitigation. Regardless, black willow thickets are located within the northern reach of Drainage B and impacts to this resource will require mitigated and compliance with CDFW 1602 Streambed Alteration Agreement (SAA) as outlined in **BIO-MM 1** (USACE/CDFW/RWQCB).

Coast Prickly Pear Scrub

the project will impact 0.12 acre of coast prickly pear scrub, which has a state rarity ranking of S3. While CDFW considers impacts to alliances with a ranking of S3 to be significant, all occurrences of coastal prickly occur in small patches that are not associated with areas of native scrub habitat and would not be considered significant. Thus, mitigation for impacts to the small patches of coast prickly pear is not necessary. An additional 0.08 acre of this alliance falls within fuel modification zones for the project; however, cactus is permissible in fuel modification zones and would not be impacted.

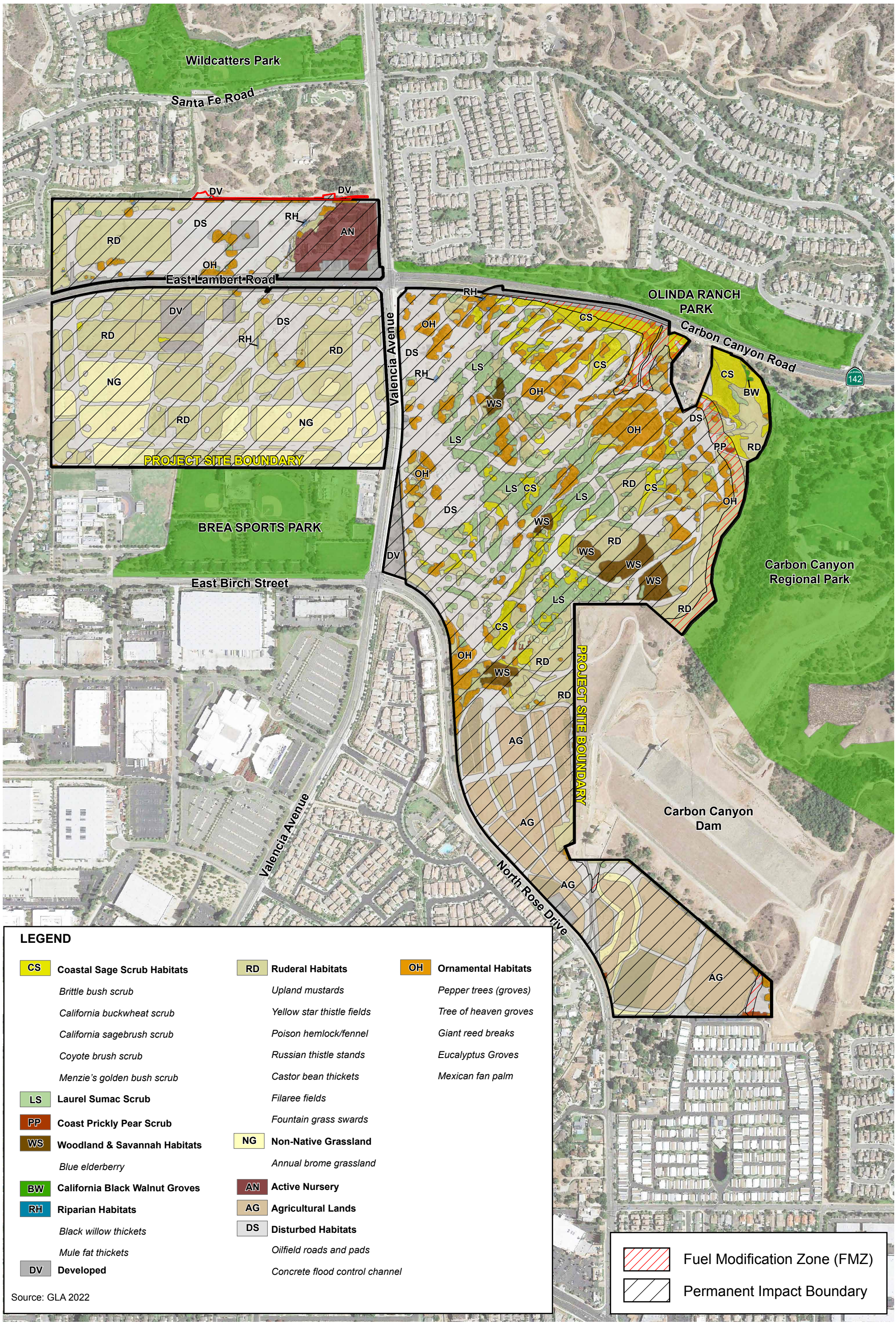

Figure 14 - Vegetation Communities Impact Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

Table 10.
Vegetation Community Impacts

Vegetation Alliances/Land Use Type	Permanent Grading Impacts onsite/offsite (ac)	Permanent FMZ Impacts (ac)	Open Space (ac)	Total Onsite/offsite (ac)
Coastal Sage Scrub Habitats				
California sagebrush scrub	7.43	0.44	1.97	9.84
California buckwheat scrub	1.04	1.03	0.87	2.94
Coyote brush scrub	0.34			0.34
Coast prickly pear scrub	0.12	0.08	0.07	0.27
Brittle bush scrub	0.05			0.05
Chaparral Habitats				
Laurel sumac scrub	16.86		0.13	16.99
Woodland & Savannah Habitats				
Blue elderberry savannah	2.56			2.56
Blue elderberry stands	1.50	0.01	0.04	1.54
Blue elderberry woodland	1.37			1.37
Walnut Grove Habitats				
Southern California black walnut groves			0.07	0.07
Riparian Habitats				
Mule fat thickets	0.11			0.11
Black Willow thickets	0.03			0.03
Non-native Grassland Habitats				
Red brome or Mediterranean grass grasslands	16.34	0.02		16.36
Ruderal Habitats				
Upland mustards	31.71	3.10	1.67	36.48
Russian thistle stands	17.83		0.17	18.01
Filaree Fields	5.10			5.10
Poison hemlock or fennel patches	0.85		0.05	0.90
Castor bean thickets	0.85			0.85
Yellow star-thistle fields	0.30			0.30
Fountain grass swards	0.06			0.06
Ornamental Habitats				
Pepper tree groves	7.46	0.35	0.24	8.05
Eucalyptus groves	6.70	0.12	0.04	6.86
Pepper tree or Laurel sumac groves	3.13			3.13
Pepper tree individuals	1.54	0.21	0.08	1.83
Giant reed breaks	0.17			0.17
Other Ornamental	0.07			0.07
Mexican fan palm	0.03			0.03
Tree of Heaven Groves	0.01			0.01
Developed/Disturbed				
Oil Field Roads and Pads	82.49	0.97	0.30	83.76
Agriculture	27.71			27.71
Developed	9.04	0.53	1.05	10.62
Active Nursery	4.61			4.61
Bare	0.67	0.27	0.43	1.37
Concrete Flood Control Channel	0.11	0.02	0.03	0.16
TOTAL	**248.19**	**7.15**	**7.21**	**262.55**

Source: GLA 2022.

Blue Elderberry Woodlands

the project will impact 1.37 acres of blue elderberry woodlands, which have a state rarity ranking of S3. CDFW considers impacts to alliances of S3 to be significant, thus, impacts to 1.37 acres of blue elderberry woodlands would be significant prior to mitigation. With mitigation, impacts would be reduced to less-than-significant. Impacts to this sensitive resource will be mitigated to a level of less than significant by implementing **BIO-MM 1** (USACE/CDFW/RWQCB).

Sensitive Plants

Southern California Black Walnut

The project will result in impacts to one special-status plant: California walnut (*Juglans californica*), which is scattered across the northern portion of the Site east of Valencia Avenue. Specifically, a total of 126 California walnuts would be impacted. California walnut is ranked as 4.2 in the CRPR which as noted in Table 3.1 above is a watch-list taxon:

> *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.*

Most of the California walnuts on the site occur within disturbed areas, many of which are dominated by blue-gum eucalyptus, Peruvian pepper, and upland mustards, along with areas of laurel sumac. Impacts to individuals of southern California walnut would not be considered significant for the reasons set forth below. Except for walnuts within 0.07-acre of walnut woodland which will not be impacted, the individual walnuts are commonly associated with disturbed habitat and areas of non-native vegetation and do not the exhibit functions that are typically associated with walnut woodland. Second, as noted, the California walnut is a List 4 taxon and is still common throughout its range and the loss of 126 walnuts would not be result of a substantial effect on this species and thus not significant. Third, the California walnut is not locally rare; rather, the adjacent Chino Hills and nearby Puente and Whittier Hills support large numbers of California walnuts, much of which is dedicated open space, ensuring that the population within northern Orange County and adjacent areas of Los Angeles County are sustainable.

Sensitive Wildlife

The project will impact the following special-status animals: coastal California gnatcatcher; and exhibits potential for impacts to least Bell's vireo, yellow warbler, California horned lark, and Cooper's hawk. The project also impacts areas of California gnatcatcher Critical Habitat Unit 9 as discussed below.

Coastal California Gnatcatcher

Two breeding pairs of coastal California gnatcatchers (FT, SSC) were detected onsite during focused survey efforts as shown in Figure 12, *Sensitive Faunal Species Observation Map*. One (1) pair was associated with a patch of California sagebrush in the central-western portion of the Project Site east of Valencia Avenue. This was the same area where a breeding pair was detected during 2017 protocol surveys. A second breeding pair was detected on a knoll approximately 750 feet northeast of the first pair in California sagebrush. During the 2017 survey a single gnatcatcher was observed in this area. The Project Site contains approximately 10.33 acres of suitable coastal scrub habitat associations within the close proximity to the coastal California gnatcatcher observations.

It is important to note that there are small, isolated patches of scrub alliances, such as coyote brush scrub and cactus scrub that occur in areas completely unsuitable for the coastal California gnatcatcher that are not included in the impacts for the gnatcatcher totaling 0.18-acre. These areas are depicted as unsuitable for the coastal California gnatcatcher and impacts to these isolated fragments, which are not within the Critical Habitat overlay would not be significant.

Impact to 10.33 acres of coastal California gnatcatcher habitat including potential breeding and foraging resources would represent a significant impact. Impacts to the coastal California gnatcatcher, potential breeding/foraging habitat will be reduced to a level of less than significant by implementing **BIO-MM 2** (Coastal California Gnatcatcher HCP & Monitoring).

Least Bell's Vireo

During protocol coastal California gnatcatcher surveys in 2018 least Bell's vireo was detected within the Project Site as shown in Figure 12, *Sensitive Faunal Species Observation Map*. This bird is a State- and Federally-listed endangered species. It breeds in dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest. Detections were of single birds and observation locations were not repeated during the early season observations, with one exception. The exception was a repeated observation of a single bird located in a eucalyptus woodland located south of the active oil field and north of the active agricultural area. Based on the timing of the least Bell's vireo observations (late May to early June) it was most likely an unpaired male. The location is vegetated with a canopy of eucalyptus trees and understory of sparse mule fat, blue elderberry, and poison oak. Based on the incidental least Bell's vireo observations within the Project Site and presence of low-quality habitat onsite, potential impacts to elderberry habitats occupied by least Bell's vireo would be mitigated to a level of less than significant by implementing **BIO-MM 4** (Least Bell's Vireo HCP).

There are no Habitat Conservation Plans or Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plan associated with the site. Impacts to the federally endangered least Bell's vireo will be authorized through a Section 7 Consultation between the USACE and USFWS. The applicant is preparing a Habitat Conservation Plan and Natural Community Conservation Plan in coordination with CDFW and USFWS.

Yellow Warbler

A yellow warbler (state species of special concern) was documented foraging on the Project Site near the southwest corner of the parcel east of Valencia Avenue, as shown in Figure 12, *Sensitive Faunal Species Observation Map*. This species is a migratory songbird that breeds in riparian habitats in southern California. The yellow warbler exhibits habitat requirements similar to the yellow-breasted chat and least Bell's vireo. Suitable habitat typically consists of multi-layered riparian scrub or willow woodland corridors along flowing streams. Potential impacts to nesting habitat for this species would be mitigated to a level of less than significant by implementing **BIO-MM 5** (Regulatory Requirement CDFG Code).

California horned lark

The California horned lark is a CDFW Watch List species. The California horned lark breeds and resides in the coastal region of California from Sonoma County southeast to the United States/Mexican border, including most of the San Joaquin Valley, and eastward to the foothills of the Sierra Nevada (Grinnell and Miller 1944; AOU 1998). The California horned lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent (Zeiner, *et al*. 1990). Range-wide, California horned larks breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats (Grinnell and Miller 1944). The California horned lark was observed foraging within the grassland portions of the Project Site. Potential impacts to nesting habitat for this species would be mitigated to a level of less than significant by implementing **BIO-MM 5** (Regulatory Requirement CDFG Code).

Cooper's Hawk

Cooper's hawk is a CDFW Watch List species when nesting. This species occurs in riparian areas and oak woodlands, and most commonly in montane canyons. This species is also known to use urban areas, occupying mature trees associated with residential and commercial development and using utility poles as perches. Cooper's hawk was observed foraging within the Project Site and the mature Eucalyptus trees represent suitable nesting habitat. Potential impacts to nesting habitat for this species would be mitigated to a level of less than significant by implementing **BIO-MM 5** (Regulatory Requirement CDFG Code).

Coastal California Gnatcatcher Critical Habitat

The proposed Project will impact areas within Critical Habitat Unit 9, designated for the coastal California gnatcatcher by the USFWS. Impacts to designated Critical Habitat will include impacts to areas meeting the definitions for PBF1 and PBF2.

It is important to note that areas within Critical Habitat Unit 9 provide for movement/dispersal opportunities along a roughly east-to-west axis between the Chino Hills and Puente Hills. The project site and associated Critical Habitat provides limited potential for dispersal due to existing development and the major roadway intersection of Valencia Avenue and Lambert Road immediately to the northwest of the Critical Habitat. The area more suitable for CAGN dispersal within the area of designated

Critical Habitat is located to the north of the Project Site as depicted Figure 13, *Regional Open Space and Proposed Mitigation Lands Map*. As summarized in Table 11, Impacts to CAGN Critical Habitat PBF's below, the project would impact 10.33 acres of PBF1 and 42.53 acres of PBF2 (52.86-acres total), both of which would be considered significant before mitigation but would be reduced to less-than-significant with mitigation.

Impacts to the coastal California gnatcatcher critical habitat will be reduced to a level of less than significant by implementing **BIO-MM 2** (Coastal California Gnatcatcher HCP & Monitoring), and **BIO-MM 3** (**Coastal California Gnatcatcher Critical Habitat**).

Table 11.
Impacts to CAGN Critical Habitat PBF's

Vegetation Alliance	PBF1	PBF2
Annual brome grassland	--	0.07
Blue elderberry (savannah)	--	2.56
California brittle bush scrub	0.05	--
California buckwheat scrub	2.07	--
California sagebrush scrub	7.87	--
Coast prickly pear scrub	0.11	--
Coyote brush scrub	0.23	--
Laurel sumac scrub	--	16.63
Mulefat thickets	--	0.02
Upland mustards	--	23.25
Subtotal	**10.33**	**42.53**

There are no Habitat Conservation Plans or Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plan associated with the site. Impacts to the federally listed threatened coastal California gnatcatcher and associated Critical Habitat Unit 9 will be authorized through a Section 7 Consultation between the USACE and USFWS. The applicant is preparing a Habitat Conservation Plan and Natural Community Conservation Plan in coordination with CDFW and USFWS.

Nesting Birds and Raptors

The project has the potential to impact active bird and raptor nests if vegetation is removed during the nesting season generally extending from February 1st to August 31st. Impacts to nesting birds are prohibited by the California Fish and Game Code 3503. Potential impacts to nesting birds and raptors would be mitigated to a level of less than significant by implementing **BIO-MM 5** (Regulatory Requirement CDFG Code)

Wildlife Movement within Project Site

Based on the extent of adjacent high-density residential development along the north, south and west boundaries and associated high traffic roadways bisecting and

bordering the property, the Project Site does not meet the definition or is expected to serve as a wildlife movement corridor for ground dwelling species.

However, the Project Site is located partially within USFWS designated critical habitat for the federally threated coastal California gnatcatcher. As previously analyzed and presented, a total of 52.86 acres of critical habitat representing PCEs were documented onsite. Impacts to the coastal California gnatcatcher critical habitat will be reduced to a level of less than significant by implementing **BIO-MM 2** (Coastal California Gnatcatcher HCP & Monitoring), and **BIO-MM3** (Coastal California Gnatcatcher Critical Habitat).

Jurisdictional Resources

The site contains no jurisdictional wetlands as defined under Section 404 of the Clean Water Act or under definitions in the Fish and Game Code or the State Water Board's wetland procedures. As such, there would be no significant impacts on wetlands. The project would impact highly degraded non-wetland streambeds as addressed below.

The project would impact 0.602-acre of highly degraded drainage courses subject to USACE jurisdiction pursuant to Section 404 of the Clean Water Act and Section 401 of the Clean Water Act as regulated by the Regional Board as outlined in Table 12, *USACE/RWQCB Jurisdictional Resources Impacts,* and shown in Figure 15*, USACE/RWQCB Jurisdictional Resources Impact Map*. Impacts to 0.602 acre of degraded drainage course would be considered significant by the RWQCB and with mitigation the impact would be reduced to less-than significant following implementation of **BIO-MM 1** (USACE/CDFW/RWQCB).

Table 12.
USACE/RWQCB Jurisdictional Resources Impacts

Drainage Feature	Type	Acres	Linear Feet
Drainage A	Non-Wetland Channel	0.363	2,422
Drainage B	Non-Wetland Ephemeral Channel	0.043	241
Drainage C	Non-Wetland Ephemeral Channel	0.086	1,149
Drainage D	Concrete Ephemeral Channel	0.11	474
	Total	**0.602**	**4,286**

Source: GLA 2022.

The Project, as proposed, would permanently impact 1.006-acre of CDFW jurisdiction, of which 0.063 acre consists of vegetated riparian habitat, and includes 4,286 linear feet of streambed as shown in Table 13, *CDFW Jurisdictional Resources Impacts,* and shown in Figure 16*, CDFW Jurisdictional Resources Impact Map*. Of the 1.006 acres, 0.11-acre of impact consists of concrete channel associated with Drainage D or the Carbon Canyon Channel and impacts to the concrete channel would not be considered significant because there are no streambed resources associated with the concrete channel. Thus, impacts to 0.896-acre of streambed of which 0.063-acre consists of riparian habitat would be considered significant. Impacts to 0.959-acre of degraded drainage course would be considered significant by the CDFW and with mitigation the impact would be reduced to less-than significant following implementation of **BIO-MM 1** (USACE/CDFW/RWQCB).

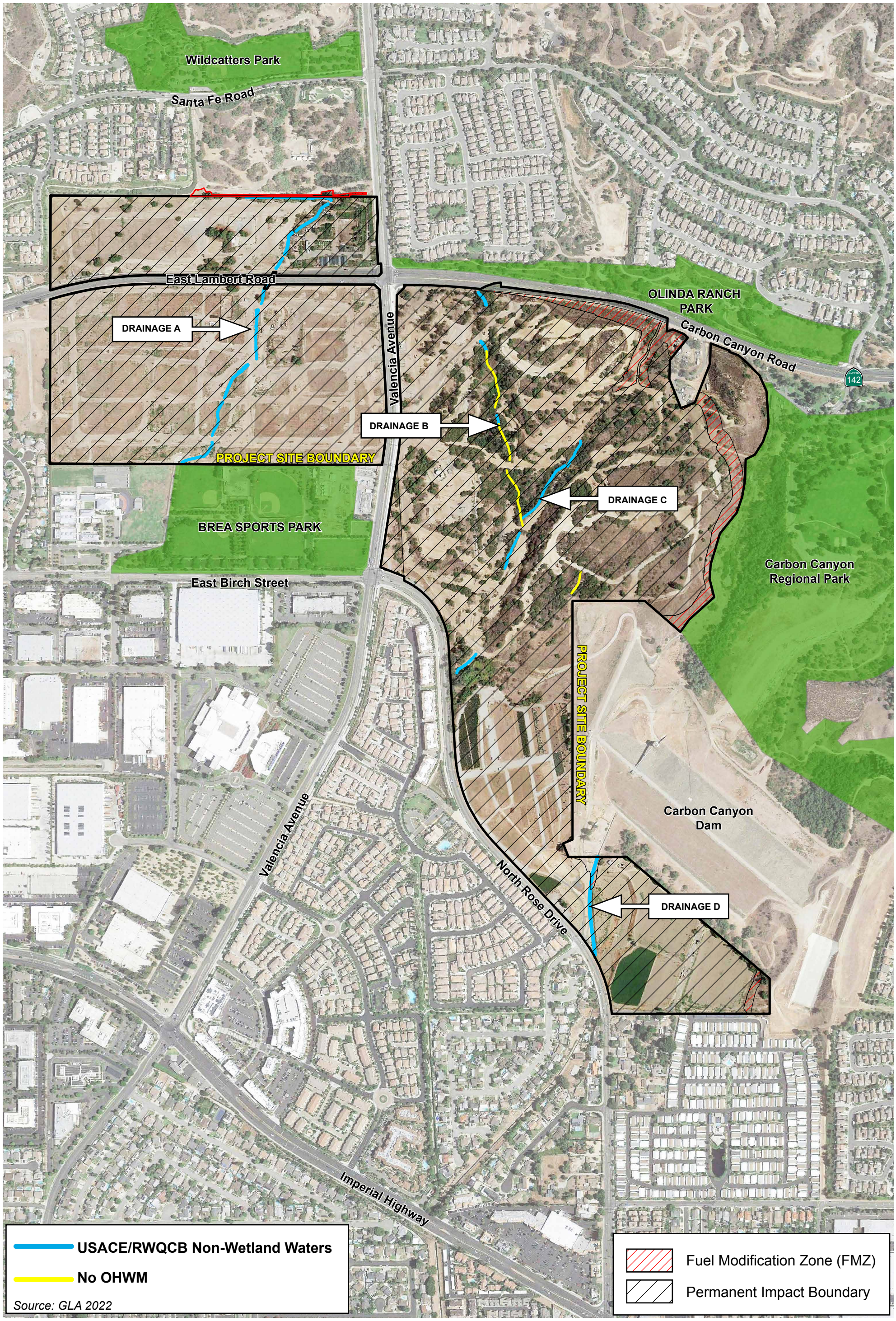

Figure 15 - USACE/RWQCB Jurisdictional Resources Impact Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

N

1 inch = 600 feet

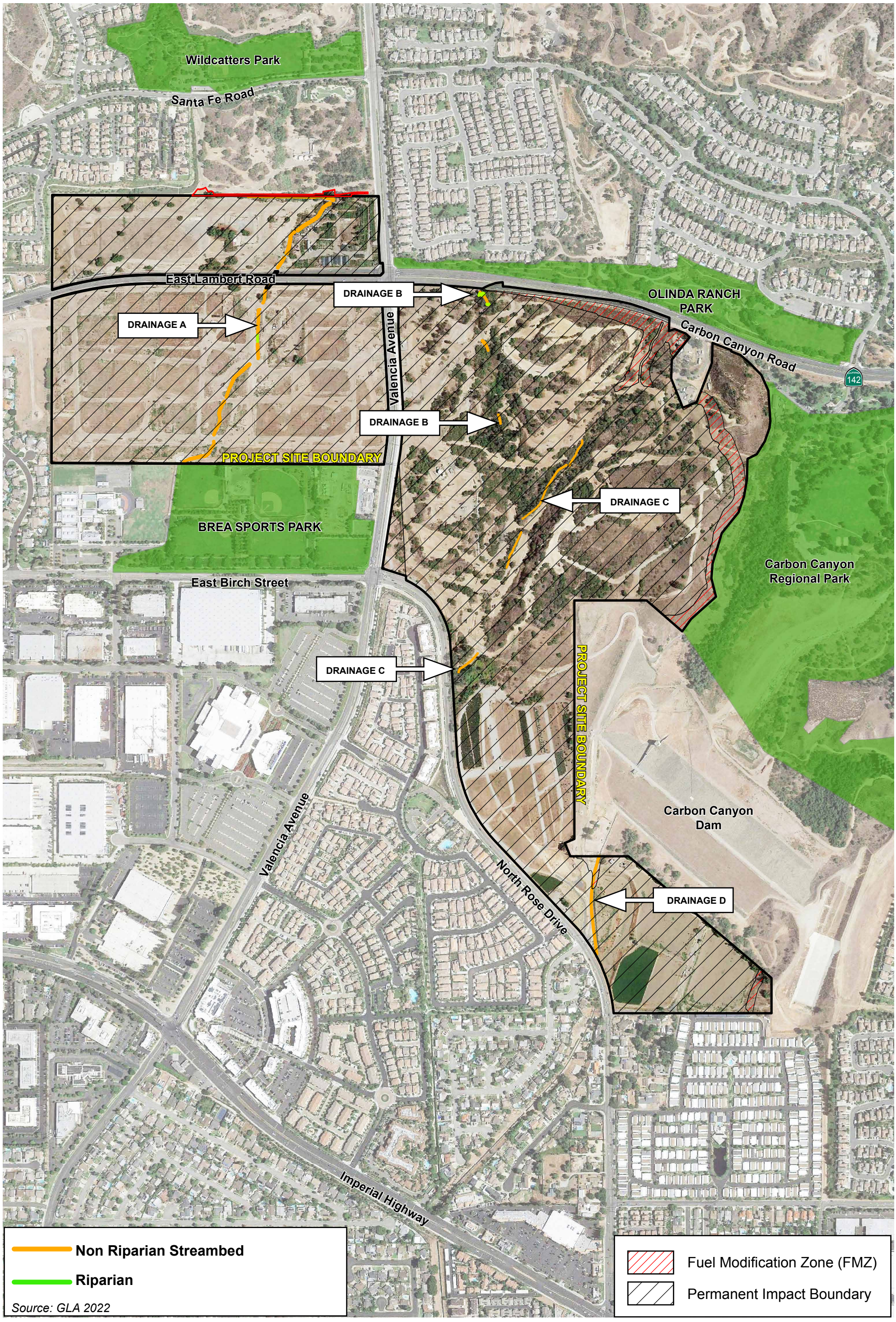

Figure 16 - CDFW Jurisdictional Resources Impact Map

Biological Resources Technical Report
Brea 265 Specific Plan

CADRE Environmental

Table 13.
CDFW Jurisdictional Resources Impacts

Drainage Feature	Non-Riparian Streambed	Riparian	Total Acres	Linear Feet
Drainage A	0.699	0.032	0.731	2,422
Drainage B	0.048	0.031	0.079	241
Drainage C	0.086	0.0	0.086	1149
Drainage D	0.11	0.0	0.11	474
Total	**0.943**	**0.063**	**1.006**	**4,286**

Source: GLA 2022.

City of Brea General Plan – Community Resources

The project does not conflict with the policies set forth in the Brea 265 Specific Plan that has been prepared for the project, which supersedes and replaces the City of Brea local policies and/or ordinances following implementation of **BIO-MM1** to **BIO-MM5**.

City of Brea Municipal Codes

The project does not conflict with the policies set forth in the Brea 265 Specific Plan that has been prepared for the project, which supersedes and replaces the City of Brea local policies and/or ordinances following implementation of **BIO-MM1** to **BIO-MM5**.

INDIRECT IMPACTS

Water Quality/Hydrology

The project will comply with all applicable water quality regulations, including obtaining and complying with those conditions established in WDRs and a National Pollutant Discharge Elimination System (NPDES) permits. Both of these permits include the treatment of all surface runoff from paved and developed areas, the implementation of applicable Best Management Practices (BMPs) during construction activities and the installation and proper maintenance of structural BMPs to ensure adequate long-term treatment of water before entering into any stream course or offsite conservation areas.

Toxics

Storm water treatment systems will be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant material, or other elements that could degrade or harm downstream biological or aquatic resources. Toxic sources within the Project Site would be limited to those commonly associated with residential, commercial, and mixed-use development, such as pesticides, insecticides, herbicides, fertilizers, and vehicle emissions. In order to mitigate for the potential effects of these toxics, the project will incorporate structural BMPs, as required in association with compliance with WDRs and the NPDES permit system, in order to reduce the level of toxins introduced into the drainage system and the surrounding areas. Water quality measures will be implemented and no significant impacts are anticipated.

Lighting

Night lighting associated with the proposed development that is adjacent to Carbon Canyon Regional Park would be directed away to reduce potential indirect impacts to wildlife species. No significant impacts are anticipated.

Noise

Because the proposed project development will not result in noise levels that exceed residential, commercial or mixed-use noise standards established for County of Orange or City of Brea, wildlife within Carbon Canyon Regional Park will not be subject to noise that exceeds these established standards. No significant impacts are anticipated. Short-term construction-related noise impacts will be reduced by the implementation of the following:

- During all Project Site excavation and grading on-site, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors (Carbon Canyon Regional Park) nearest the Project Site.

- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors (Carbon Canyon Regional Park) nearest the Project Site during all project construction.

- The construction contractor shall limit all construction-related activities that would result in high noise levels according to the construction hours to be determined by City of Brea staff.

- The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.

The project has the potential to indirectly impact active bird and raptor nests during initial construction related vegetation removal during the nesting season generally extending from February 1st to August 31st. Potential indirect impacts to nesting birds and raptors are prohibited by the California Fish and Game Code 3503. Potential indirect impacts to nesting birds and raptors would be mitigated to a level of less than significant by implementing **BIO-MM 5** (Regulatory Requirement CDFG Code)

Invasive Species

The landscape plans for the residential, commercial and mixed development shall avoid the use of invasive species. All landscape plans must use native and/or drought-tolerant plant materials appropriate for their location and soil type, as identified in standard agricultural suitability soils test. Preferred landscaping materials shall consist of native plants identified in the city's landscape design manual. A final landscape

design will be developed and submitted to the City of Brea Director of Community Services for review and approval. No significant impacts are anticipated.

CUMULATIVE IMPACTS

The temporary direct and/or indirect impacts of the project would not result in significant cumulative impacts (CEQA Section 15310) to environmental resources within the region of the Project Site. Cumulative impacts refer to incremental effects of an individual project when assessed with the effects of past, current, and proposed projects. Although the project would result in the loss of 255.34-acres of primarily disturbed habitat types resulting from oil operations since the 1900's, cumulative impacts will be mitigated to a level of less than significant by preserving a total 52.86-acres of open space habitat within and immediately adjacent to the 14,000 acre Chino Hills State Park located within the existing Puente-Chino Hills wildlife corridor, **BIO-MM3** (Coastal California Gnatcatcher Critical Habitat).

MITIGATION MEASURES

The following biological mitigation measures address those adverse impacts determined to be potentially significant, or are relevant to the protection of biological resources to the extent practicable as part of ensuring compliance with local, federal, state and CEQA guidelines.

Impacts to USACE/CDFW/RWQCB regulatory resources (0.896-acre), sensitive vegetation (0.03-acre black willow thicket, 1.37-acre blue elderberry woodland), and LBV habitat (1.37-acre blue elderberry woodland) will collectively be mitigated thorough the reestablishing 2.74-acres of streambed and associated blue elderberry woodland (**BIO-MM 1** and **BIO-MM 4**).

BIO-MM 1 USACE/CDFW/RWQCB

The project would result in impacts to ephemeral streambed regulated under Section 404 of the Clean Water Act, Section 1602 of the Fish and Game Code, and the Waste Discharge Requirement of Porter Cologne. Because impacts to CDFW jurisdiction exceed impacts to USACE jurisdiction, mitigation is based on impacts to CDFW jurisdiction.

Prior to issuance of a grading permit, the project applicant will obtain a 404 Nationwide Permit from the USACE, 1602 SAA from CDFW, and a 401 RWQCB Certification for impacts to jurisdictional resources. During the permit/certification processes a Habitat Mitigation Monitoring Plan (HMMP) will be developed and approved by the City of Brea, USACE, CDFW and RWQCB as described below (Habitat Mitigation Monitoring Plan).

All proposed regulatory restoration activities will occur within the 52.86-acres of open space lands proposed for dedication as outlined in **BIO-MM3** (Coastal California Gnatcatcher Critical Habitat).

Specifically, the project would impact 0.943-acre of drainage channel and 0.063-acre of riparian habitat subject to Section 1602 of the California Fish and Game Code; however, 0.11 acre consists of the concrete segment of Carbon Canyon Creek downstream of Carbon Canyon Dam which contains no fish or wildlife resources and impacts to this concrete channel would not be considered significant. Thus, impacts to ephemeral drainage channel subject to Section 1602 jurisdiction requiring mitigation would total 0.833 acre of drainage channel plus 0.063 acre of riparian habitat (0.896-acre total).

Impacts to USACE and RWQCB jurisdiction under the Porter Cologne Waste Discharge Requirements totals 0.602 acre of which 0.11 acre consists of the concrete segment of Carbon Canyon Channel. Thus, the necessary mitigation for Section 1602 impacts will also address the impacts to USACE and RWQCB jurisdiction. Impact would be mitigated at a greater than 3:1 ratio:

- Establish and/or reestablish 2.74-acres of streambed and associated blue elderberry woodland, inclusive of **BIO-MM 4** (**Least Bell's Vireo HCP**), in association with stream re-establishment or rehabilitation at a location approved by CDFW and the RWQCB, either within lands owned or controlled by Aera Energy within or adjacent to Chino Hills State Park as shown in Figure 13, *Regional Open Space and Proposed Mitigation Lands Map*

Habitat Mitigation Monitoring Plan

If restoration is proposed the project applicant shall develop an HMMP for impacts to jurisdictional resources including black willow thickets (state rarity ranking of S3). The HMMP shall be prepared by a qualified Biologist and approved by the USACE, CDFW and RWQCB. The Applicant shall begin restoration activities (e.g., soil prep, seeding, planting) no later than one year after issuance of the first permit that allows for ground disturbance (e.g., grading permit). The Applicant shall be fully responsible for implementing the revegetation program until the restoration areas have met the success criteria outlined in the HMMP. The regulatory agencies shall have final authority over mitigation area sign-off. The HMMP will include at a minimum 1) project description, 2) mitigation goals, 3) description of mitigation site, 4) implementation approach, 5) maintenance/monitoring approach, 6) success criteria/contingency measures, and 7) funding mechanism.

BIO-MM 2 Coastal California Gnatcatcher HCP & Monitoring

A Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA will be developed as part of formal consultation with the USFWS for impacts to 10.33-acres of occupied and suitable coastal California gnatcatcher habitat. Upon development of the HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at a 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 USFWS may require as being necessary or appropriate for the HCP. With implementation of the following measures including **BIO-MM3** (**Coastal California Gnatcatcher Critical Habitat**), as approved in consultation with USFWS, impacts to

coastal California gnatcatcher occupied, areas of (i) and areas of PCE (ii) project impacts would be mitigated to less than significant:

Impacts to 10.33-acres of occupied and suitable coastal California gnatcatcher habitat will be mitigated as outlined below. The following proposed establishment and/or restoration activities, approved by the USFWS, will occur offsite within the lands proposed for dedication including 52.86-acres of open space lands located within and adjacent to Chino Hills State Park as shown in Figure 13, *Regional Open Space and Proposed Mitigation Lands Map,* including:

- Coastal Sage Scrub Establishment/Restoration (2:1) 20.66-acres

- Prepare Habitat Restoration Plan that will include the following components, Location, Site Preparation Methods, Plant Palette, Planting Methods, Maintenance Requirements, Monitoring and Reporting Procedures, Performance Standards.

The Applicant shall begin coastal sage scrub restoration activities (e.g., soil prep, seeding) no later than one year after issuance of the first permit that allows for ground disturbance (e.g., grading permit).

The HCP will also include monitoring requirements to ensure nesting activities are not directly or indirectly impacted as a result of project initiation. The take of active coastal California gnatcatcher nests, which includes harassment of the bird due to grading noise and vibrations from February 15th through July 1st, is not permitted. Therefore, grading and removal of habitat during this time frame will only be permitted subject to the following conditions having been met to the satisfaction of the USFWS.

The applicant is hereby advised that, during grading, if active nests are found within 500 feet of the grading, the grading activity shall be stopped until such time as mitigation measures, to the satisfaction of the USFWS are implemented. There is no guarantee that grading will be allowed to resume during the nesting season.

Before issuance of a clearing/grading permit, if grading or clearing is to occur between February 15th and July 1st, the applicant shall provide to the City of Brea a letter from a qualified biologist retained by the applicant, with a scope of work for a coastal sage scrub habitat and coastal California gnatcatcher survey, and a report for the area to be cleared and/or graded and coastal sage scrub habitat areas within 500 feet of such area. The biologist shall coordinate with the USFWS to determine the appropriate survey methodology. The purpose of the survey is to determine if any active gnatcatcher nests are located in the area to be cleared or graded, or in coastal sage scrub habitat within 500 feet of such area. To be considered qualified, the biologist must provide the City with a copy of a valid coastal California Gnatcatcher Recovery Permit from the USFWS.

The scope of work shall explain the survey methodology for the biological survey and the proposed coastal California gnatcatcher nest monitoring activities during the clearing/grading operation. Should the report show, to the satisfaction of the USFWS, that gnatcatcher nests are not present within the area to be graded/cleared, or within coastal sage scrub habitat located within 500 feet of said area, approval may be granted

to commence clearing/grading within the coastal California gnatcatcher nesting season from February 15th through July 1st.

If coastal California gnatcatchers are nesting within the area to be graded/cleared, or within coastal sage scrub habitat located within 500 feet of said area, no grading will be allowed during this time until such time as mitigation measures, to the satisfaction of the City of Brea and the USFWS are implemented.

The biologist must attend the City's pre-construction meeting for the project and must be present onsite during all clearing/grading activities to monitor that the clearing/grading activities stay within the designated limits. During this period, the biologist shall also monitor and survey the habitat within the area to be cleared/graded and any habitat within 500 feet of said area for any evidence that a coastal California gnatcatcher nest(s) exists or is being built. Should evidence of a coastal California gnatcatcher nest(s) be discovered, the grading operation shall cease in that area and be directed away from the coastal California gnatcatcher nest(s) to a location greater than 500 feet away from the nest(s).

Upon completion of the clearing/grading activities, the applicant's biologist shall submit to the City of Brea and USFWS a biological monitoring report summarizing the observations of the biologist, including whether any coastal California gnatcatchers or evidence of active coastal California gnatcatcher nests were present during clearing and grading activities within the area and any habitat within 500 feet of said area.

BIO-MM 3 Coastal California Gnatcatcher Critical Habitat

Impacts to 52.86-acres of USFWS coastal California gnatcatcher critical habitat with PBFs 1 or PBFs 2 will be mitigated by preserving a total 52.86-acres of open space habitat within and immediately adjacent to the existing Puente-Chino Hills wildlife corridor. The proposed preserved lands will include 22.50 acres of in-holdings (SWEPI Retained Drill Sites) within the Chino Hills State Park and Shell/Aera oil retained lands located within the coastal California gnatcatcher critical habitat boundary within which a minimum of 20.66 acres of coastal sage scrub restoration will occur as outlined in **BIO-MM 2**. The proposed land conservation would also provide a significant contribution to a region of open space adjacent to Carbon Canyon Road identified as a "Priority Crossing Improvement Area - A" (CBI 2005). The fee title dedication of 52.86-acres of open space lands located within and adjacent to Chino Hills State Park within the Puente-Chino Hills wildlife corridor, coastal California gnatcatcher critical habitat, priority crossing improvement area, and within which 20.66-acres of coastal sage scrub restoration is proposed would represent a significant acquisition and contribution to regional wildlife movement conservation goals. The proposed conserved lands will be offered to the Chino Hills State Park for consideration of acquisition.

BIO-MM 4 Least Bell's Vireo HCP

A Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the FESA will be developed as part of formal consultation with the USFWS for impacts to 1.37-acres of least Bell's vireo habitat (Blue elderberry Woodland). Upon development of the HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at a 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 USFWS or CDFW may require as being necessary or appropriate for the HCP.

The following proposed preservation and/or restoration activities, approved by the USFWS, will occur offsite within the lands proposed for dedication including 52.86-acres of open space lands located within and adjacent to Chino Hills State Park as shown in Figure 13, *Regional Open Space and Proposed Mitigation Lands Map,* including:

- Blue elderberry Woodland Establishment (2:1) 2.74-acres, inclusive of **BIO-MM 1** (**USACE/CDFW/RWQCB**)

- Prepare Habitat Restoration Plan that will include the following components, Location, Site Preparation Methods, Plant Palette, Planting Methods, Maintenance Requirements, Monitoring and Reporting Procedures, Performance Standards

The Applicant shall begin coastal sage scrub restoration activities (e.g., soil prep, seeding) no later than one year after issuance of the first permit that allows for ground disturbance (e.g., grading permit).

The HCP will also include monitoring requirements to ensure nesting activities are not directly or indirectly impacted as a result of project initiation. The take of active least Bell's vireo nests, which includes harassment of the bird due to grading noise and vibrations from April 14th through July 31st, is not permitted. Therefore, grading and removal of habitat during this time frame will only be permitted subject to the following conditions having been met to the satisfaction of the City of Brea and USFWS.

The applicant is hereby advised that, during grading, if active nests are found within 500 feet of the grading, the grading activity shall be stopped until such time as mitigation measures, to the satisfaction of the City of Brea and the USFWS are implemented. There is no guarantee that grading will be allowed to resume during the nesting season.

BIO-MM 5 Regulatory Requirement CDFG Code

Regulatory requirement for potential direct/indirect impacts to nesting common and sensitive bird and raptor species will require compliance with the CDFG Code Section 3503. Construction outside the nesting season (between September 1st and January 31st) do not require pre-removal nesting bird surveys. If construction is proposed between February 1st and August 31st, a qualified biologist must conduct a nesting bird survey(s) no more than fourteen (14) days prior to initiation of grading to document the presence or absence of nesting birds within or directly adjacent (100 feet) to the Project Site.

The survey(s) will focus on identifying any raptors and/or bird nests that are directly or indirectly affected by construction activities. If active nests are documented, species-specific measures shall be prepared by a qualified biologist and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of a nest shall be postponed until the young birds have fledged. The perimeter of the nest setback zone shall be fenced or adequately demarcated with stakes and flagging at 20-foot intervals,

and construction personnel and activities restricted from the area. A survey report by a qualified biologist verifying that no active nests are present, or that the young have fledged, shall be submitted to the City of Brea for review and approval prior to initiation of grading in the nest-setback zone.

The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts on these nests occur. A final monitoring report of the findings, prepared by a qualified biologist, shall be submitted to the City of Brea documenting compliance with the CDFG Code. Any nest permanently vacated for the season would not warrant protection pursuant to the CDFG Code.

Implementation of Mitigation Measures **BIO-MM1** through **BIO-MM5** would reduce all potential significant unavoidable impacts on biological resources below a level of significance.

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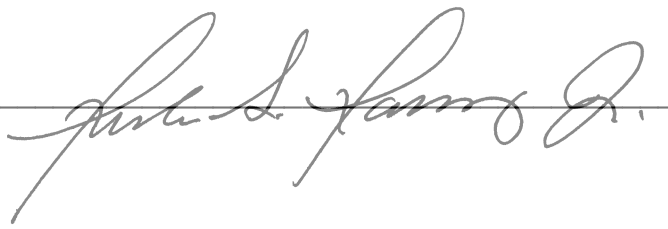
Certification "*I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge.*

Author:  _____Date: February 15, 2022

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APPENDIX A: FLORAL COMPENDIUM

(Source GLA 2022)

The floral compendium lists species identified on the project site. Taxonomy follows the Jepson Manual (Baldwin et al 2012) and, for sensitive species, the California Native Plant Society's Rare Plant Inventory (Tibor 2001). Common plant names are taken from Hickman (1993), Munz (1974), and Roberts et al (2004). An asterisk (*) denotes a non-native species.

Scientific Name	Common Name
MAGNOLIOPHYTA	**FLOWERING PLANTS**
DICOTYLEDONS	**DICOTS**
AMARANTHACEAE	**Amaranth Family**
Amaranthus blitoides	prostrate pigweed
ADOXACEAE	**Elderberry Family**
Sambucus nigra ssp. caerulea	blue elderberry
ANACARDIACEAE	**Sumac Family**
Malosma laurina	laurel sumac
**Schinus molle*	Peruvian pepper tree
**Schinus terebinthifolius*	Brazilian pepper tree
APIACEAE	**Carrot Family**
**Conium maculatum*	poison hemlock
**Foeniculum vulgare*	sweet fennel
ASTERACEAE	**Sunflower Family**
Artemisia californica	California sagebrush
Baccharis pilularis	coyote brush
Baccharis salicifolia	mule fat
**Centaurea melitensis*	tocalote
Conyza Canadensis	common horseweed
**Dimorphotheca sinuate*	African daisy
Encelia californica	California bush sunflower
Encelia farinosa	brittlebush
Heterotheca grandiflora	telegraph weed
Helianthus annuus	common sunflower
**Helminthotheca echoides*	bristly ox-tongue
Isocoma menziesii	Menzie’s goldenbush
**Lactuca serriola*	prickly lettuce
**Pulicaria paludosa*	Spanish false fleabane
Psuedognaphalium californicum	California everlasting
**Sonchus oleraceus*	common sow-thistle

BORAGINACEAE	**Borage Family**
Amsinckia intermedia	common fiddleneck
Heliotropium curassavicum	heliotrope
BRASSICACEAE	**Mustard Family**
**Brassica nigra*	black mustard
**Hirschfeldia incana*	summer mustard
**Sisymbrium irio*	London rocket
CACTACEAE	**Cactus Family**
Opuntia littoralis	prickly pear
CHENOPODIACEAE	**Goosefoot Family**
**Chenopodium album*	lamb's quarters
**Salsola tragus*	Russian thistle
CRASSULACEAE	**Stonecrop Family**
Dudleya lanceolata	lanceleaf liveforever
EUPHORBIACEAE	**Spurge Family**
Euphorbia albomarginata	rattlesnake sandmat
Croton californicus	California croton
**Euphorbia maculata*	spotted spurge
**Ricinus communis*	castor bean
FABACEAE	**Legume Family**
**Melilotus indicus*	Annual yellow sweetclover
FAGACEAE	**Oak Family**
Quercus berberidifolia	scrub oak
GERANIACEAE	**Geranium Family**
**Erodium botrys*	broad leaf filaree
**Erodium cicutarium*	red-stemmed filaree
**Erodium moschatum*	white-stemmed filaree
JUGLANDACEAE	**Walnut Family**
Juglans californica	Southern California black walnut
LAMIACEAE	**Mint Family**
Salvia apiana	white sage
MALVACEAE	**Mallow Family**
**Malva parviflora*	cheeseweed

MYRTACEAE	**Myrtle Family**
**Eucalyptus sp.*	eucalyptus
PLATANACEAE	**Myrtle Family**
Platanus racemosa	western sycamore
POLYGONACEAE	**Buckwheat Family**
Eriogonum elongatum	longstem buckwheat
Eriogonum fasciculatum	California buckwheat
SALICACEAE	**Willow Family**
Salix goodingii	black willow
SCROPHULARIACEAE	**Figwort Family**
Mimulus auranticus	sticky monkey flower
SIMAROUBACEAE	**Quassia Family**
**Ailanthus altissima*	tree of heaven
SOLANACEAE	**Nightshade Family**
Datura wrightii	Jimsonweed
**Nicotiana glauca*	tree tobacco
Solanum americanum	white nightshade
URTICACEAE	**Nettle Family**
**Urtica urens*	dwarf nettle
VITACEAE	**Grape Family**
Vitis californica	California wild grape
MAGNOLIOPHYTA **MONOCOTYLEDONES**	**FLOWERING PLANTS** **MONOCOTS**
AREACEAE	**Palm Family**
Washingtonia filifera	California fan palm
**Washingtonia robusta*	Mexican fan palm
POACEAE	**Grass Family**
**Arundo donax*	giant reed
**Avena barbata*	slender oat
**Bromus diandrus*	ripgut brome
**Bromus madritensis* ssp. *rubens*	foxtail chess
**Hordeum murinum ssp. leporinum*	foxtail barley
**Pennisetum setaceum*	fountain grass

APPENDIX B: FAUNAL COMPENDIA

(Source GLA 2022)

Vertebrates identified in the field by sight, calls, tracks, scat, or other signs are cited according to the nomenclature of Collins (1997) for amphibians and reptiles, AOU (1998) for birds, and Jones et al. (1992) for mammals.

LEGEND

Presence of animals noted by direct sighting, call identification or observation of tracks, scat or other signs

† Denotes species not observed but expected to occur on site
* Denotes non-native species

TERRESTRIAL VERTEBRATES

REPTILES

IGUANIDAE - IGUANID LIZARDS

Sceloporus occidentalis
western fence lizard
Uta stansburiana
side-blotched lizard

COLUBRIDAE - COLUBRID SNAKES

† *Pituophis melanoleucus*
gopher snake
† *Lampropeltis getulus*
common kingsnake

BIRDS

ANATIDAE - SWANS AND GEESE

Branta canadensis
Canada goose

PHASIANIDAE - PHEASANTS & QUAILS

Callipepla californica
California quail

CATHARTIDAE - NEW WORLD VULTURES

Cathartes aura
turkey vulture

ACCIPITRIDAE - HAWKS

Accipiter cooperi
Cooper's hawk
Buteo jamaicensis
red-tailed hawk

CHARADRIIDAE - SHOREBIRDS

Charadrius vociferus
killdeer

SCOLOPACIDAE - SHOREBIRDS

Numenius phaeopus
whimbrel

APODIDAE - PIGEONS & DOVES

Zenaida macroura
mourning dove

CUCULIDAE - CUCKOOS

Geococcyx californianus
greater roadrunner

COLUMBIDAE - SWIFTS

Aeronautes saxatalis
White-throated swift

TROCHILIDAE - HUMMINGBIRDS

Calypte anna
Anna's hummingbird
Selasphorus sasin
Allen's hummingbird

PICIDAE - WOODPECKERS

Picoides nuttallii
Nuttall's woodpecker
Melanerpes formicivorus
acorn woodpecker

FALCONIDAE - FALCONS

Falco sparverius
American kestrel

TYRANNIDAE - TYRANT FLYCATCHERS

Contopus cooperi
olive-sided flycatcher
Empidonax difficilis
pacific-slope flycatcher
† *Sayornis nigricans*
black phoebe
Sayornis saya
Say's phoebe
Myiarchus cinerascens
ash-throated flycatcher
Tyrranis verticalis
Western kingbird

VIREONIDAE - VIREOS

Vireo bellii
least Bell's vireo

CORVIDAE - JAYS & CROWS

Aphelocoma californica
Western scrub-jay
Corvus brachyrhynchos
American crow
Corvus corax
common raven

HIRUNDINIDAE - SWALLOWS

Hirundo rustica
barn swallow

Hirundo pyrrhonota
cliff swallow

Stelgidopteryx serripennis
northern rough-winged swallow

AEGITHALIDAE - BUSHTITS

Psaltriparus minimus
bushtit

TROGLODYTIDAE - WRENS

Thryomanes bewickii
Bewick's wren
Troglodytes aedon
house wren

POLIOPTILIDAE - GNATCATCHERS

Polioptila caerulea
blue-gray gnatcatcher
Polioptila californica
California gnatcatcher

MUSCICAPIDAE - KINGLETS, GNATCATCHERS, THRUSHES & BABBLERS

Chamaea fasciata
wrentit

TURDIDAE - THRUSHES

Sialia mexicana
Western bluebird

MIMIDAE - THRASHERS

Toxostoma redivivum
California thrasher
Mimus polyglottos
Northern mockingbird

STURNIDAE - STARLINGS

* *Sturnus vulgaris*
European starling

MOTACILLIDAE - PIPITS

Anthus rubescens
American pipit

PTILIOGONATIDAE

Phainopepla nitens
Phainopepla

PARULIDAE - WOOD WARBLERS

Oreothlypis celata
orange crowned warbler

Geothlypis trichas
common yellowthroat
Setophaga coronata
yellow-rumped warbler
Cardellina pusilla
Wilson's warbler

EMBERIZIDAE – SPARROWS, BUNTINGS, WARBLERS, & RELATIVES

Melozone crissalis
California towhee
Pipilo maculatus
spotted towhee
Melospiza melodia
song sparrow
Zonotrichia leucophrys
white-crowned sparrow

CARDINALIDAE - TANAGERS AND CARDINALS

Pheucticus melanocephalus
black-headed grosbeak

ICTERIDAE - BLACKBIRDS AND ORIOLES

Sturnella neglecta
Western meadowlark
† *Euphagus cyanocephalus*
Brewer's blackbird
Molothrus ater
brown headed cowbird

Icterus cucullatus
hooded oriole
Icterus bullockii
Bullock's oriole

FRINGILLIDAE - FINCHES

Carpodacus mexicanus
house finch
Carduelis psaltria
lesser goldfinch

PASSERIDAE - OLD WORLD SPARROWS

*† *Passer domesticus*
house sparrow

MAMMALS

DIDELPHIDAE - NEW WORLD OPOSSUMS

†* *Didelphis virginiana*
Virginia opossum

VESPERTILIONIDAE - EVENING BATS

† *Myotis spp.*
myotis bat

GEOMYIDAE - POCKET GOPHERS

† *Thomomys bottae*
Botta's pocket gopher

MURIDAE - MICE, RATS, AND VOLES

† *Peromyscus maniculatus*
deer mouse

PROCYONIDAE - RACCOONS

† *Procyon lotor*
raccoon

CERVIDAE - DEER

Odocoileus hemionus
mule Deer

CANIDAE - CANINES

Canius latrans
coyote

LEPORIDAE - RABBITS AND HARES

Sylvilagus bachmani
brush rabbit

FELIDAE - WILD CATS

Lynx rufus
bobcat

CRICETIDAE - NEW WORLD MICE AND RATS

Neotoma fuscipes
dusky woodrat

SCIURIIDAE - SQUIRRELS

Otospermophilus beecheyi
California ground squirrel

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