5.4 BIOLOGICAL RESOURCES

The analysis in this section is based in part on the following technical report(s):

- *Biological Resources Technical Report: Brea 265 Specific Plan City of Brea, Orange County, California*, Cadre Environmental, January 2022.

A complete copy of this study is included in Appendix D of this Draft EIR.

5.4.1 Environmental Setting

5.4.1.1 REGULATORY BACKGROUND

Federal and State Regulations

Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973, as amended, protects and conserves any species of plant or animal that is endangered or threatened with extinction, as well as the habitats where these species are found. "Take" of endangered species is prohibited under Section 9 of the FESA. "Take" means to "harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct." Section 7 of the FESA requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) on proposed federal actions that may affect any endangered, threatened, or proposed (for listing) species or critical habitat that may support the species. Section 4(a) of the FESA requires that critical habitat be designated by the USFWS "to the maximum extent prudent and determinable, at the time a species is determined to be endangered or threatened." This provides guidance for planners/managers and biologists by indicating locations of suitable habitat and where preservation of a particular species has high priority. Section 10 of the FESA provides the regulatory mechanism for incidental take of a listed species by private interests and nonfederal government agencies during lawful activities. Habitat conservation plans (HCPs) for the impacted species must be developed in support of incidental take permits to minimize impacts to the species and formulate viable mitigation measures.

Federal Classifications

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 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 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 Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected.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 should be considered Federal Species of Concern. This term is used in this analysis, but carries no official protections. All references to federally protected species in this DEIR (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.

5. Environmental Analysis
BIOLOGICAL RESOURCES

For the purposes of the analysis in this section, 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 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:

- 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

- 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.

Critical habitat designations are the USFWS's method of identifying for federal agencies the physical or biological features (to the extent known from information available at the time of designation) 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 in an area considered essential to the conservation of the species (such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) affirms and implements the United States' commitment to four international conventions—with Canada, Japan, Mexico, and Russia—to protect shared migratory bird resources. The MBTA governs the take, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these items, except under a valid permit or as permitted in the implementing regulations. USFWS administers permits to take migratory birds in accordance with the MBTA.

Clean Water Act, Section 404

The United States Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into "waters of the United States."[1] Any filling or dredging within waters of the United States requires a permit,

[1] "Waters of the United States," as applied to the jurisdictional limits of the USACE under the Clean Water Act, includes all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the tide; all interstate waters, including interstate wetlands; and 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 whose use, degradation, or destruction could affect interstate or foreign commerce; water impoundments; tributaries of waters; territorial seas; and wetlands adjacent to waters. The terminology

which entails assessment of potential adverse impacts to USACE wetlands and jurisdictional waters and any mitigation measures that the USACE requires. Section 7 consultation with USFWS may be required for impacts to a federally listed species. When a Section 404 permit is required, a Section 401 Water Quality Certification is also required from the Regional Water Quality Control Board (RWQCB).

Clean Water Act, Section 401 and 402

Section 401(a)(1) of the CWA specifies that any applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters shall provide the federal permitting agency with a certification, issued by the state in which the discharge originates, that any such discharge will comply with the applicable provisions of the CWA. In California, the applicable RWQCB must certify that the project will comply with water quality standards. Permits requiring Section 401 certification include USACE Section 404 permits and National Pollutant Discharge Elimination System (NPDES) permits issued by the Environmental Protection Agency (EPA) under Section 402 of the CWA. NPDES permits are issued by the applicable RWQCB. The City of Brea is in the jurisdiction of the Santa Ana RWQCB (Region 8).

California Fish and Game Code, Section 1600

Section 1600 of the California Fish and Game Code requires a project proponent to notify the California Department of Fish and Wildlife (CDFW) of any proposed alteration of streambeds, rivers, and lakes. The intent is to protect habitats that are important to fish and wildlife. CDFW may review and place conditions on the project, as part of a Streambed Alteration Agreement, that address potentially significant adverse impacts within CDFW's jurisdictional limits.

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the FESA and is administered by the CDFW. Its intent is to prohibit take and protect state-listed endangered and threatened species of fish, wildlife, and plants. Unlike its federal counterpart, CESA also applies the take prohibitions to species petitioned for listing (state candidates). Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species. Under certain conditions, CESA has provisions for take through a 2081 permit or memorandum of understanding. In addition, some sensitive mammals and birds are protected by the state as "fully protected species." California "species of special concern" are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's California Natural Diversity Database (CNDDB), which maintains a record of known and recorded occurrences of sensitive species. Informally listed taxa are not protected per se, but warrant consideration in the preparation of biological resources assessments.

used by Section 404 of the Clean Water Act includes "navigable waters," which is defined at Section 502(7) of the act as "waters of the United States, including the territorial seas."

State Classifications

For the purposes of the analysis in this section, 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

The California Native Plant Society (CNPS) is a private organization dedicated to the monitoring and protection of sensitive plant species in the state. This organization has compiled an inventory of the geographic distribution and qualitative characterization of rare, threatened, or endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW, and the CNPS has the following categories of rarity ranking called California Rare Plant Ranking (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.

The CNPS also adds an extension to the CRPR:

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

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 threatened under the CESA.

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. 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., Global Ranking G1or State Ranking S1) indicates extreme rarity. Rare species are given a ranking from 1 to 3. Species with a ranking of 4 or 5 have 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' global rarity is between G1 and G3. A ranking with "?" such as "S4?" indicates 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 to 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.

Special Status Criteria

For the purpose of this analysis, plants were considered "special status" based on one or more of the following criteria:

- Listing through the FESA or 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.

Local

The project site is in the City of Brea and unincorporated Orange County, and the project site is subject to the regulations of both jurisdictions.

City of Brea General Plan

The City of Brea General Plan Community Resources Element has goals and policies that pertain to protecting biological resources.

- **Goal CR-4:** 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.

  - **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.

  - **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.

- **Goal CR-8:** Preserve and maintain wildlife and animal movement corridors.
  - **Policy CR-8.1.** Preserve key wildlife migration corridors and habitat areas.
  - **Policy CR-8.2.** Provide adequate wildlife crossings where roadways have severed habitat areas.
  - **Policy CR-8.3.** Cooperate with regional agencies and authorities with similar goals in protecting and enhancing wildlife and animal movement corridors.
  - **Policy CR-8.4.** Regular monitoring of medium and large mammals is necessary to gauge the effective ness of wildlife corridors and to identify or increases in wildlife populations.
- **Goal CR-9:** 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.
  - **Policy CR-9.2.** Preserve the integrity of blue line streams and riparian habitat areas.
  - **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.
  - **Policy CR-9.4.** Protect sensitive plant species resources from the impacts of development
  - **Policy CR-9.5.** Manage areas of diverse wildlife habitat as a natural resource and prevent major destruction **or** disruption.
  - **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.

City of Brea Municipal Code

The Brea Municipal Code (BMC) identifies land use categories, development standards, and other provisions for development projects in the City of Brea. Section 20.206 provides provisions for development in the hillside residential zone (HR). Section 20.306.090 provides provisions for open space. The purpose of this section is to establish open space requirements and standards for the Hillside Residential zone to:

- Ensure open space is an integral part of subdivision design.
- Preserve prominent landforms, rock outcroppings, hydrologic features, and sensitive and unique habitat as permanent open space features to help frame a community's identity.
- Provide areas where residents can enjoy active and passive recreation; to integrate landscaped medians, parkways, and slopes into a development project.

- Ensure that parks, recreation centers, trails, and greenbelts are located next to natural open space to maximize the amount of contiguous areas of open space within a community and create space transition zones between residential development and open space.

The City of Brea has tree removal and replacement standards for development in the HR zone. Section 20.206.160.D, Tree Removal and Replacement, states:

> 1. For each existing native tree or shrub removed or damaged with a combined caliper equal to or greater than four (4) inches at four (4) feet above finish grade, a twenty-four (24)-inch box minimum replacement tree or shrub of the same genus and species shall be planted on the site. For trees equal to or in excess of an eight (8)-inch combined caliper, the replacement tree shall be a forty-eight (48)-inch box or larger of the same genus and species. Should a tree of the same genus and species not be available, the applicant shall submit reasonable proof of general unavailability in the region, and a list of no less than five (5) substitutes, one (1) of which shall be of the same genus, for approval by the Director of Development Services.
>
> 2. The Director of Development Services may approve a substitute or may require provisions, including but not limited to bonds or similar security, to assure the installation and maintenance of the specific genus desired.
>
> In order to ensure that native vegetation, such as oak trees, survive the construction phase of hillside development, any grading activities must be appropriately setback from the vegetation. Tree protection standards are established to ensure that preserved trees survive the construction phase. The preservation of trees will benefit hillside communities by giving an established appearance to the community.

In addition, Section 20.206 provides landscaping standards for the zone. BMC Section 20.206.160.D provides tree removal and replacement requirements, which is further discussed under Section 5.4.2, *Plans, Programs, and Policies*. Section 18.24.190 of the BMC provides requirements for street trees and landscaping along all streets and highways. Chapter 12.20 of the BMC also provides provisions for street trees, including the maintenance and removal of street trees.

5.4.1.2 INTERAGENCY MEETINGS

The following summarizes interagency meetings held to present and discuss the existing biological conditions, anticipated impacts to sensitive resources, critical habitat, jurisdictional features, and mitigation approaches. Representative agencies/jurisdictions included the USACE and USFWS.

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

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

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

The listed directives have been incorporated into the overall project design as presented in the biological resources technical report.

5.4.1.3 EXISTING CONDITIONS

The majority of the project site contains active oil operations by Aera Energy LLC. Approximately 190 oil wells have been drilled on the site, and 110 oil wells remain in operation. 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 is scattered within the oilfield operations. Areas east of Valencia Avenue also support agricultural fields and operations bordering North Rose Drive. The areas west of Valencia Avenue include active and abandoned nursery facilities and active oil operations. Two ephemeral, disturbed drainages traverse the project site—a single drainage in the western region, and a drainage with a tributary in the eastern region.

The western region of the project site is relatively flat, but the eastern region has slopes ranging from 2 to 75 percent. Elevations range from approximately 400 to 590 feet above sea level. The project site contains the following soil types: Alo clay, Anaheim loam, Balcom clay loam, Callequas clay loam, Metz loamy sand, Mocho loam, Myford sandy loam, pits-Omni clay, San Emigdio fine sandy loam, Sorrento loam, and Yorba cobbly sandy loam. The soils association map in Figure 8 of the Biological Resources Technical Report (see Appendix D of this Draft EIR) shows the location of each of these soil types.

Field Surveys

The project applicant's biological consultant conducted the following biological resources surveys, and the dates and responsible biologists are summarized in Table 5.4-1, *Summary of Biological Surveys for the Project Site*:

- Focused burrowing owl surveys
- Focused California gnatcatcher surveys
- Focused bat surveys
- Focused crotch bumblebee surveys
- Vegetation mapping and habitat assessment
- Focused and general plant surveys
- Jurisdictional delineation

Table 5.4-1 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,	JA, TB
Survey Type	**2021 Survey Dates**	**Biologists**
Vegetation Mapping & Jurisdictional Delineation	7/12, 7/23	TB

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

The field surveys in Table 5.4-1 were conducted to meet the following objectives:

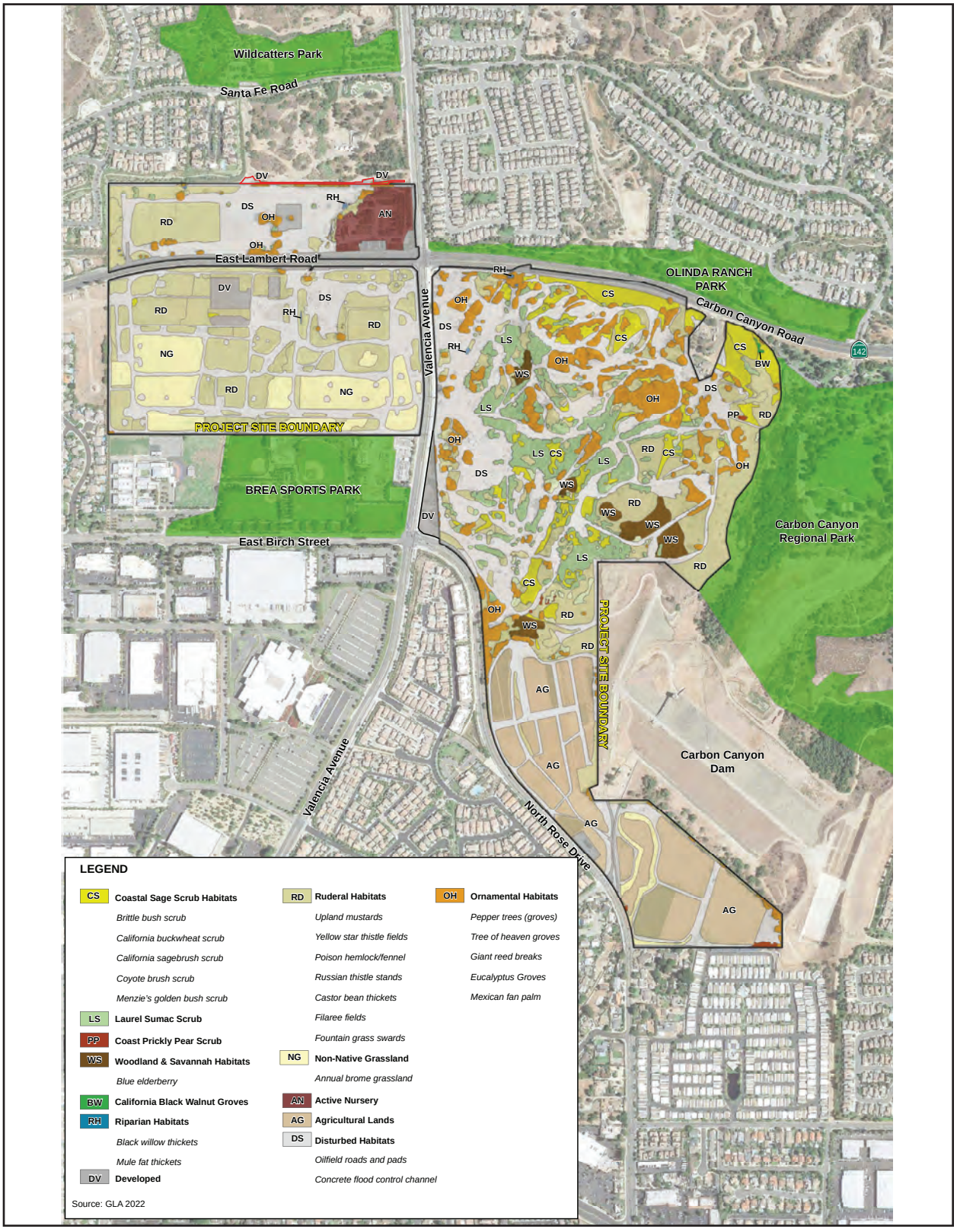
- Performance of vegetation mapping;
- Performance of site-specific habitat assessments and associated focused biological surveys to evaluate the potential presence/absence of special status species (or potentially suitable habitat) to the satisfaction of CEQA and federal and state regulations; and
- 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.

The details of the survey efforts and results are included in the Biological Technical Report (Appendix D to the DEIR).

Vegetation Communities

The project site is 262.1 acres and is dominated by nine habitat types—coastal sage scrub, chaparral, woodland and savannah, walnut grove, riparian, nonnative grassland, ruderal, ornamental, and developed/disturbed. Figure 5.4-1, *Vegetation Communities Map*, shows the locations of onsite habitats, and the following list provides a description of each habitat.

Figure 5.4-1 - Vegetation Communities Map
5. Environmental Analysis



Offsite Impact Area

0 1,000
Scale (Feet)

Source: CADRE Environmental, 2022

5. Environmental Analysis
BIOLOGICAL RESOURCES

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- **Coastal Sage Scrub Habitat.** The project site includes 13.44 acres of coastal sage scrub habitat composed of California sagebrush scrub (9.84 acres), California buckwheat scrub (2.94 acres), coyote brush scrub (0.34 acre), coast prickly pear scrub (0.27 acre), and brittle bush scrub (0.05 acre). The California sagebrush scrub occurs primarily in areas of the project site east of Valencia Avenue in small isolated patches. The California buckwheat scrub occurs along the northern edge of the portion of the site east of Valencia Avenue. The coyote brush scrub occurs throughout the project site; where it does occur, it covers over 50 percent of the scrub layer with other occurring species. The coast prickly pear scrub occurs east of Valencia Avenue and at the southern end of the project site in small isolated patches. The brittle bush scrub occurs near the central-eastern boundary of the project site east of Valencia Avenue.

- **Chaparral Habitat.** The project site includes 16.99 acres of laurel sumac scrub. The habitat primarily occurs on the project site east of Valencia Avenue. The laurel sumac exhibits greater than 50 percent relative cover in the shrub canopy.

- **Woodland and Savannah Habitat.** The project site includes 5.47 acres of woodland and savannah habitat, which includes blue elderberry savannah (2.56 acres), blue elderberry stands (1.54 acres), and blue elderberry woodland (1.37 acres). The blue elderberry savannah occurs in the central portion of the project site east of Valencia Boulevard. The blue elderberry stands are scattered throughout the eastern parcel of the project site and cover greater than 5 percent of the shrub overstory. The blue elderberry woodland habitat is scattered throughout the eastern parcel and covers greater than 50 percent of the shrub overstory in these areas.

- **Walnut Grove Habitat.** The project site includes 0.07 acre of southern California black walnut groves. This habitat occurs on the northeastern edge of the project site, east of Valencia Avenue. In this area, it has a greater than 50 percent relative cover in the tree canopy.

- **Riparian Habitat.** The project site includes 0.14 acre of riparian habitat, which includes 0.11 acre of mule fat thickets and 0.03 acre of black willow thickets. The mule fat thickets occurs in the ephemeral drainage west of Valencia Avenue. The black willow thickets occur in two patches near the northeastern boundary of the project site east of Valencia Avenue.

- **Nonnative Grassland Habitat.** The project site includes 16.36 acres of red brome or Mediterranean grasslands. Areas throughout the project are dominated by these exotic, annual brome grasses.

- **Ruderal Habitat.** The project site includes 61.7 acres of ruderal habitat of upland mustards (36.48 acres), Russian thistle stands (18.01 acres), filaree fields (5.10 acres), poison hemlock or fennel patches (0.9 acre), castor bean thickets (0.85 acre), yellow star-thistle fields (0.3 acre), and fountain grass swards (0.06 acre). Upland mustards and Russian thistle strands occur throughout the project site and are invasive, nonnative species. Filaree fields (nonnative species) are primarily located west of Valencia Avenue, near the agricultural fields. Poison hemlock or fennel patches are nonnative and invasive and occur in several areas east of Valencia Avenue. Caster bean thickets occur throughout the project site. A patch of yellow star-thistle, a nonnative invasive species, occurs on the eastern side of the project site west of Valencia

Boulevard. A patch of fountain grass swards, an invasive nonnative species, occurs on the northern portion of the project site east of Valencia Avenue.

- **Ornamental Habitat:** The project site includes 20.15 acres of ornamental habitat, which includes pepper tree groves (8.05 acres), eucalyptus groves (6.86 acres), pepper tree or laurel sumac groves (3.13 acres), pepper tree individuals (1.83 acres), giant reed breaks (0.17 acre), other ornamental (0.07 acre), Mexican fan palm (0.03 acre), and tree of heaven groves (0.01 acre). Different species of pepper trees occur in groves on the western and eastern parcels of the project site. Nonnative eucalyptus species dominate in the central and northern areas of the project site east of Valencia Avenue. Peruvian pepper tree and laurel sumac groves are on the east of Valencia Avenue on the project site. Pepper tree individuals are in the western and eastern portions of the project site. Giant reed breaks, a nonnative invasive species, are on the northern boundary of the project site east of Valencia Avenue. Other nonnative ornamental species occur on the northwestern corner of the project site east of Valencia Avenue. Mexican fan palms, a nonnative species, occur in both the western and eastern portions of the project site. The tree of heaven is a nonnative, invasive species that occurs along East Lambert Road on the project site west of Valencia Avenue.

- **Developed/Disturbed:** The project site contains 128.38 acres of developed or disturbed land, which consists of oil field roads and pads (83.76 acres), agricultural fields and operations (27.71 acres), development (10.77 acres), active nursery (4.61 acres), bare ground (1.37 acres), and concrete flood control channel (0.16 acre). The oil operations occur throughout the project site. The agricultural land is on the southern half of the project site east of Valencia Avenue. Developed areas occur adjacent to roads and structures throughout the project site. The active nursery is west of Valencia Avenue and north of East Lambert Road. Bare ground primarily occurs on the southern portion of the project site adjacent to the agricultural operations. A concrete flood control channel is located between the agricultural areas on the southern portion of the project site.

Table 5.4-2, *Vegetation Communities Acreages*, provides a summary of vegetation/land uses, global and state ranking, and the corresponding acreage.

Table 5.4-2 Vegetation Communities Acreages

Vegetation Community	Scientific Name / Vegetation Alliance	Global and State Rank	CA Code	Acres
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
			Subtotal	**13.44**
Chaparral Habitats				
Laurel sumac scrub	*Malosma laurina Shrubland Alliance*	G4 S4		16.99
Woodland and Savannah Habitats				
Blue elderberry savannah	*Sambucus nigra Shrubland Alliance*	N/A	N/A	2.56
Blue elderberry stands	*Sambucus nigra Shrubland Alliance*		*63.410.01	1.54
Blue elderberry woodland	*Sambucus nigra Shrubland Alliance*	G3 S3	*63.410.01	1.37
			Subtotal	**5.47**
Walnut Grove Habitats				
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
			Subtotal	**0.14**
Nonnative 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*	N/A	N/A	18.01
Filaree Fields		N/A	N/A	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*	N/A	N/A	0.85
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
			Subtotal	**61.7**
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	6.86
Pepper tree or Laurel sumac groves	*Schinus (molle, terebinthifolius)-Malosma laurina Semi-Natural Woodland Stands*	N/A	N/A	3.13

Table 5.4-2 Vegetation Communities Acreages

Vegetation Community	Scientific Name / Vegetation Alliance	Global and State Rank	CA Code	Acres
Pepper tree individuals	*Schinus (molle, terebinthifolius) Semi-Natural Woodland Stand*	Cal-IPC limited		1.83
Giant reed breaks	*Arundo donax Semi-Natural Herbaceous Stands*	Cal-IPC high	42.080.01	0.17
Other Ornamental		N/A	N/A	0.07
Mexican fan palm	*Washingtonia robusta Semi-Natural Woodland Alliance*	N/A	N/A	0.03
Tree of Heaven Groves	*Ailanthus altissima Semi-Natural Woodland Stands*	N/A	N/A	0.01
			Subtotal	**20.15**
Developed / Disturbed				
Oil Field Roads and Pads	N/A	N/A	N/A	83.76
Agriculture	N/A	N/A	N/A	27.71
Developed	N/A	N/A	N/A	10.77
Active Nursery	N/A	N/A	N/A	4.61
Bare	N/A	N/A	N/A	1.37
Concrete Flood Control Channel	N/A	N/A	N/A	0.16
			Subtotal	**128.38**
TOTAL				**262.7**

Source: Cadre 2022.

Global Ranking

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 Ranking

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.

Cal-IPC = California Invasive Plant Council.

Coastal California Gnatcatcher Critical Habitat

The coastal California gnatcatcher (*Polioptila californica californica*) is federally listed threatened and a California species of special concern that typically appears in or near dynamic and successional sage scrub habitat in Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. Non–sage scrub habitats, such as chaparral, grassland, and riparian areas, in proximity to sage scrub habitat provide space for dispersal, foraging, and nesting. A 141.40-acre portion of the project site east of Valencia Avenue is included in Critical Habitat Unit 9 designated for the coastal California gnatcatcher, as depicted in Figure 5.4-2, *Sensitive Faunal Species Observations Map*. The area designated as critical habitat consists of an active oil field that supports a predominance of nonnative trees, including blue gum eucalyptus and Peruvian pepper mixed with laurel sumac chaparral and limited areas of coastal sage scrub. The project site also contains substantial areas devoted to oil production activities, including unvegetated roads and pads. The portion of the project site designated critical habitat is bordered on the north by existing residential development, Valencia Avenue, and former nursery lands to the west that support nonnative 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 are in the critical habitat overlay) and residential development. To the east is Carbon Canyon Regional Park and USACE-owned land associated with Carbon Canyon Dam that supports very limited areas of coastal sage scrub habitat.

Of the 141.40 acres of critical habitat, 83.98 acres (59.39 percent) do not constitute physical and biological features (PBF)—also known as primary constituent elements (PCE)—and 57.42 acres (40.61 percent) contain PBFs.[2] 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. The 2007 Final Rule for California gnatcatcher Critical Habitat categorizes PBFs as follows:

- **PBF1:** 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.

- **PBF2:** Non-sage scrub habitats such as chaparral, grassland, riparian areas, in proximity to sage scrub habitats as described for PBF 1 that provide space for dispersal, foraging, and nesting.

For areas with PBFs, 13.18 acres consist of fragmented coastal sage scrub, thereby constitute PBF1, and 44.24 acres consists of non-sage scrub habitat in proximity to sage scrub, thereby constitute PBF2 within the project site. Thus, of the 141.40 acres of critical habitat onsite, only 13.18 acres (9.3 percent) provide potential breeding habitat (PBF1). Of the PBF2 areas, 24.91 acres (17.62 percent) consist of nonnative mustards and annual nonnative grassland, which provide areas for foraging and movement only. And laurel sumac scrub, blue

[2] The designation of critical habitat for gnatcatcher uses the term primary constituent element (PCE). The new critical habitat regulations (81 FR 7214) replace this term with physical and biological features (PBF). This shift in terminology does not change the approach used in conducting the biological analysis, and the term PCE and PBF are both used in the DEIR.

elderberry savannah, and mule fat thickets account for 19.33 acres (13.67 percent), and though not suitable for breeding, do provide suitable foraging habitat and material for nest building when in close association with suitable breeding sites. Table 5.4-3, *Coastal California Gnatcatcher PBF Assessment*, provides a detailed breakdown of the 141.40 acres of critical habitat.

Table 5.4-3 Coastal California Gnatcatcher PBF Assessment

Habitat	Acreage	Habitat	Acreage	Habitat	Acreage
Project Site with Physical Biological Features Within Critical Habitat					
Upland mustards	24.84	Blue elderberry (savannah)	2.56	California brittle bush scrub	0.05
Laurel sumac scrub	16.75	Coyote brush scrub	0.23	Mule fat thickets	0.02
California sagebrush scrub	9.85	Coast prickly pear scrub	0.11		
California buckwheat scrub	2.94	Annual brome grassland	0.07		
Total PBF Within Critical Habitat: 13.18 (PBF1) + 44.24 (PBF2) = 57.42 acres					
Project Site without Physical Biological Features Within Critical Habitat					
Oilfield Roads and Pads	46.70	Blue elderberry (woodland)	1.37	Bare	0.20
Agriculture	11.10	Pepper tree	1.19	Giant reed thickets	0.10
Pepper tree grove	6.88	Poison hemlock patches	0.90	California walnut (groves)	0.07
Eucalyptus (groves)	6.58	Castor bean thickets	0.37	Fountain grass swards	0.06
Pepper/Laurel sumac (groves)	3.13	Filaree fields	0.28	Other ornamental	0.04
Developed	2.93	Russian thistle stands	0.26	Black willow thickets	0.03
Blue elderberry (individuals)	1.54	Yellow star thistle stands	0.24	Mexican fan palm	0.01
Total Project Site Not PBF Within Critical Habitat = 83.98 acres					
Total project site in critical habitat = 57.42 (PBF) + 83.98 (not PBF) = 141.4 acres					

Figure 5.4-2 - Sensitive Faunal Species Observations Map
5. Environmental Analysis

Offsite Impact Area

0 1,000
Scale (Feet)

Source: CADRE Environmental, 2022

5. Environmental Analysis
BIOLOGICAL RESOURCES

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Wildlife

A total of 65 species, including reptiles, birds, and mammals, were recorded within the project site. Table 5.4-4, *Observed and Expected Wildlife Onsite*, lists the observed species and species that were not observed but are expected to occur on site.

Table 5.4-4 Observed and Expected Wildlife Onsite

Common Name	Scientific Name	Common Name	Scientific Name
OBSERVED			
Reptiles			
western fence lizard	*Sceloporus occidentalis*	side-blotched lizard	*Uta stansburiana*
Birds			
Canada goose	*Branta canadensis*	bushtit	*Psaltriparus minimus*
California quail	*Callipepla californica*	Bewick's wren	*Thryomanes bewickii*
turkey vulture	*Cathartes aura*	house wren	*Troglodytes aedon*
Cooper's hawk	*Accipiter cooperi*	blue-gray gnatcatcher	*Polioptila caerulea*
red-tailed hawk	*Buteo jamaicensis*	California gnatcatcher	*Polioptila californica*
killdeer	*Charadrius vociferus*	wrentit	*Chamaea fasciata*
whimbrel	*Numenius phaeopus*	Western bluebird	*Sialia mexicana*
mourning dove	*Zenaida macroura*	California thrasher	*Toxostoma redivivum*
greater roadrunner	*Geococcyx californianus*	Northern mockingbird	*Mimus polyglottos*
white-throated swift	*Aeronautes saxatalis*	European starling	*Sturnus vulgaris*
Anna's hummingbird	*Calypte anna*	American pipit	*Anthus rubescens*
Allen's hummingbird	*Selasphorus sasin*	Phainopepla	*Phainopepla nitens*
Nuttall's woodpecker	*Picoides nuttallii*	orange crowned warbler	*Oreothlypis celata*
acorn woodpecker	*Melanerpes formicivorus*	common yellowthroat	*Geothlypis trichas*
American kestrel	*Falco sparverius*	yellow-rumped warbler	*Setophaga coronata*
olive-sided flycatcher	*Contopus cooperi*	Wilson's warbler	*Cardellina pusilla*
Pacific-slope flycatcher	*Empidonax difficilis*	California towhee	*Melozone crissalis*
Say's phoebe	*Sayornis saya*	spotted towhee	*Pipilo maculatus*
ash-throated flycatcher	*Myiarchus cinerascens*	song sparrow	*Melospiza melodia*
western kingbird	*Tyrranis verticalis*	white-crowned sparrow	*Zonotrichia leucophrys*
least Bell's vireo	*Vireo bellii*	black-headed grosbeak	*Pheucticus melanocephalus*
western scrub-jay	*Aphelocoma californica*	Western meadowlark	*Sturnella neglecta*
American crow	*Corvus brachyrhynchos*	brown headed cowbird	*Molothrus ater*
common raven	*Corvus corax*	hooded oriole	*Icterus cucullatus*
barn swallow	*Hirundo rustica*	Bullock's oriole	*Icterus bullockii*
cliff swallow	*Hirundo pyrrhonota*	house finch	*Carpodacus mexicanus*
northern rough-winged swallow	*Stelgidopteryx serripennis*	lesser goldfinch	*Carduelis psaltria*
Mammals			
mule deer	*Odocoileus hemionus*	bobcat	*Lynx rufus*
coyote	*Canius latrans*	dusky woodrat	*Neotoma fuscipes*
brush rabbit	*Sylvilagus bachmani*	California ground squirrel	*Otospermophilus beecheyi*
Mexican free-tailed bat	*Tadarida brasiliensis*	canyon bat	*Parastrellus hesperus*

Table 5.4-4 Observed and Expected Wildlife Onsite

Common Name	Scientific Name	Common Name	Scientific Name
EXPECTED TO OCCUR ON SITE BUT NOT OBSERVED			
Reptiles			
gopher snake	*Pituophis melanoleucus*	common kingsnake	*Lampropeltis getulus*
Birds			
black phoebe	*Sayornis nigricans*	house sparrow	*Passer domesticus*
Brewer's blackbird	*Euphagus cyanocephalus*		
Mammals			
Virginia opossum	*Didelphis virginiana*	deer mouse	*Peromyscus maniculatus*
myotis bat	*Myotis spp.*	raccoon	*Procyon lotor*
Botta's pocket gopher	*Thomomys bottae*		

Source: Cadre 2019.
Notes: Presence of animals noted by direct sighting; call identification; or observation of tracks, scat, or other signs.

Jurisdictional Waters and Wetlands

Wetlands are "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," as defined by 33 CFR 328.3(c)(4). Wetlands include areas such as streams, swaps, marshes, and bogs.

USACE and RWQCB Jurisdictional Waters

The USACE and RWQCB jurisdiction on the project site is associated with four ephemeral drainage features: Drainage A traverses the western portion of the project site; Drainage B traverses the eastern portion of the site and includes a small tributary "Drainage C"; and Drainage D is a concrete channelized segment of Carbon Canyon Creek in the southern portion of the project site. Figure 5.4-3, *USACE/RWQCB Jurisdictional Resources Map*, depicts the location of these drainages. Drainages A, B, and C include nonwetland ephemeral waters, and Drainage D consists of a concrete channel. As shown in Table 5.4-5, *USACE Jurisdictional Resource Acreages*, Drainage A is the largest of the four and includes 0.363 acre and 2,422 linear feet. Drainages B and C are 0.043 and 0.086 acre, respectively, and 241 and 1,149 linear feet, respectively. The concrete channel is 0.159 acre and 687 linear feet on the project site.

Table 5.4-5 USACE/RWQCB Jurisdictional Resource Acreage

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

Figure 5.4-3 - USACE/RWQCB Jurisdictional Resources Map
5. Environmental Analysis

Offsite Impact Area

0 1,000
Scale (Feet)

Source: CADRE Environmental, 2022

5. Environmental Analysis
BIOLOGICAL RESOURCES

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CDFW Jurisdictional Waters

The CDFW jurisdiction is associated with the four drainage features. As shown in Table 5.4-6, *CDFW Jurisdictional Resource Acreage*, Drainage A contains 0.699 acre of nonriparian streambed and 0.032 acre of mule fat scrub riparian habitat. Drainage B contains 0.048 acre of ephemeral streambed and 0.031 acre of willow forest riparian habitat. Drainage C and Drainage D contain 0.086 and 0.159 acre of ephemeral streambed, respectively. Figure 5.4-4, *CDFW Jurisdictional Resources Map*, depicts the portion of the drainages that qualify as riparian.

Table 5.4-6 CDFW Jurisdictional Resource Acreage

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	0.00	0.086	1,149
Drainage D	0.159	0.00	0.159	687
Total	**0.86**	**0.063**	**1.055**	**4,499**

Sensitive Resources

Sensitive Habitats

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

The project site contains the following four special-status vegetation communities identified by the CNDDB:

- Southern California Black Walnut Woodland
- Blue Elderberry Woodland (not listed in the CNDDB for the subject quadrangles)
- Goodding's Black Willow Forest (not listed in the CNDDB for the subject quadrangles)
- Coast Prickly Pear (not listed in the CNDDB for the subject quadrangles)

A discussion of each of these vegetation communities is provided above. The location of each of these habitats is provided on Figure 5.4-1, and acreages tabulated in Table 5.4-2, *Vegetation Community Acreages*.

Sensitive Plants

For the purpose of this DEIR, plants were considered "special-status" based on one or more of the following criteria:

- Listing through FESA and/or CESA
- Occurrence in the CNPS Rare Plant Inventory (Rank 1A/1B, 2A/2B, 3, or 4)
- Occurrence in the CNDDB inventory

The Southern California black walnut is the only sensitive-status plant found on the project site. The Southern California black walnut has a California Rare Plant Rank (CRPR) List 4.2, which means that the species is of limited distribution throughout the 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. This species is not federal or state listed as threatened or endangered. Figure 5.4-5, *Sensitive Floral Species Observations Map,* shows the locations of the Southern California black walnut, which is the only sensitive floral species observed on the project site.

Table 5.4-7, *Sensitive Plant Species with Potential to Occur Onsite*, provides a list of special-status plants that occur onsite or have a potential to occur on the project site. Species were evaluated based on: 1) species identified by the CNDDB and CNPS as occurring on or in vicinity of the project site (either currently or historically), 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. A complete list of the species that were evaluated is in Table 7 of the Biological Resources Technical Report (see Appendix D of the DEIR).

Table 5.4-7 Sensitive Plant Species with Potential to Occur Onsite

Common Name	Scientific Name	Federal / State Status	CDFG or CNPS	Potential to Occur
Braunton's milkvetch	*Astragalus brauntonii*	FE / None	List 1B.1	Potential to occur
Catalina mariposa lily	*Calochortus catalinae*	None / None	List 4.2	Potential to occur but not detected
Chaparral nolina	*Nolina cismontana*	None / None	List 1B.2	Potential to occur but not detected
Coulter's matilija poppy	*Romneya coulteri*	None / None	List 4.2	Potential to occur but not detected
Hubby's phacelia	*Phacelia hubbyi*	None / None	List 4.2	Potential to occur but not detected
Paniculate tarplant	*Deinandra paniculata*	None / None	List 4.2	Potential to occur but not detected
Robinson's pepper grass	*Lepidium virginicum var. robinsonii*	None / None	List 1B.2	Potential to occur but not detected
Southern California black walnut	*Juglans californica*	None / None	List 4.2	126 individuals observed onsite, including 0.07 acre Southern California black walnut grove

Source: Cadre, Biological Resources Technical Report, 2019.
Note: Table only includes species that occur onsite or have the potential to occur onsite. Refer to Table 7 of the Biological Resources Technical Report for a complete list.
USFWS: Federal Classifications
FE: Federally Endangered
Potential to occur – The species has a potential to occur onsite based on suitable habitat, but its presence/absence could not be confirmed.
CNPS: California Native Plant Society Classifications
1B: Plants rare, threatened, or endangered in California, but more common elsewhere
4: Plants of limited distribution, a watch list
.1: Seriously endangered in California
.2: Fairly endangered in California

Figure 5.4-4 - CDFW Jurisdictional Resources Map
5. Environmental Analysis

Source: CADRE Environmental, 2022

5. Environmental Analysis
BIOLOGICAL RESOURCES

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Figure 5.4-5 - Sensitive Floral Species Observations Map
5. Environmental Analysis

Offsite Impact Area

0 1,000
Scale (Feet)

Source: CADRE Environmental, 2022

5. Environmental Analysis
BIOLOGICAL RESOURCES

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Sensitive Wildlife

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 or California Fully Protected species

Five 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) were detected onsite during focused survey efforts, as shown on Figure 5.4-2. One 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) passed through the survey area, as shown on Figure 5.4-2. 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 in a eucalyptus woodland 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 11, 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 where the 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 on Figure 5.4-2. 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 multilayered 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. The California horned lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. California horned

larks breed in level or gently sloping shortgrass prairie, montane meadows, "bald" hills, open coastal plains, fallow grain fields, and alkali flats. The California horned lark was observed foraging within the grassland portions of the project site.

- **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.

Figure 5.4-2 shows the sightings in the project site of each of the special-status species discussed above. Table 5.4-8, *Sensitive Wildlife Species with Potential to Occur Onsite*, provides a list of special-status wildlife that have been detected onsite or have not been detected onsite but have the potential to occur. Table 8 in the Biological Resources Technical Report (Appendix D to the DEIR) provides a complete list of all the wildlife species that were evaluated for potential occurrence on the project site.

Table 5.4-8 Sensitive Wildlife Species with Potential to Occur Onsite

Common Name (Scientific Name)	Federal / State Status	CDFW	Habitat Requirements	Potential for Occurrence
California horned lark *(Eremophila alpestris actia)*	None / None	WL	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Detected onsite.
Coast horned lizard *(Phrynosoma blainvillii)*	None / None	SSC	Chaparral and coastal sage scrub	Moderate potential to occur on site. Not observed.
Coastal cactus wren *(Campylorhynchus brunneicapillus sandiegensis)*	BBC / None	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)*	FT / None	SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Observed breeding on site.
Coastal whiptail *(Aspidoscelis tigris stejnegeri)*	None / None	SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Potential to occur on site. Not observed.
Cooper's hawk *(Accipiter cooperii)*	None / None	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.
Great blue heron (*Ardea Herodias)*	None / None	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)*	None / None	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.

Table 5.4-8 Sensitive Wildlife Species with Potential to Occur Onsite

Common Name (Scientific Name)	Federal / State Status	CDFW	Habitat Requirements	Potential for Occurrence
Least Bell's vireo *(Vireo bellii pusillus)*	FE / SE	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.
Merlin *(Falco columbarius)*	None/None	WL	Nests in forested openings, edges, and along rivers. Winters 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.
Orange-throated whiptail *(Aspidoscelis hyperythra)*	None / None	SSC	Coastal sage scrub, chaparral, nonnative grassland, oak woodland, and juniper woodland.	Potential to occur on site.
Pallid bat *(Antrozous pallidus)*	None / None	SSC	Habitats with rocky, outcropped areas.	Potential to occur for foraging. Not detected during surveys.
Red-diamond rattlesnake *(Crotalus ruber)*	None / None	SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Potential to occur on site; not detected during surveys.
Southern California rufous-crowned sparrow *(Aimophila ruficeps canescens)*	None / None	WL	Grass-covered hillsides, coastal sage scrub, and chaparral.	Low potential to occur on site. Not detected during surveys.
Western mastiff bat *(Eumops perotis californicus)*	None / None	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 to 40 feet above ground, from sea level up through mixed conifer forests.	Potential to occur on site. Not detected during surveys.
Western yellow bat (*Lasiurus xanthinus)*	None / None	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.
White-tailed kite *(Elanus leucurus)*	None / None	FP	Breeds in riparian trees in lower elevation areas. Known from San Diego to San Luis Obispo counties.	Low potential to occur on site for foraging; not observed during surveys
Yellow-breasted chat *(Icteria virens)*	None / None	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)*	BCC / None	SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Observed foraging on site.

Source: Cadre 2022.

USFWS: Federal Classifications
FE Federally Endangered
FC Federal Candidate for Listing

STATE (CDFW): State Classifications
SE State Endangered
SPE State Proposed Endangered
SSC State Species of Special Concern
WL California Watch List
SFP State Fully Protected

Occurrence:
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, but absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, but its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

As identified by Table 5.4-7, the following special status wildlife species were not detected on site 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. The coast horned lizard was not observed during many hours of surveys but has limited potential to occur 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, but this species is considered locally rare. 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 species has a low potential to occur within the project site.

- **Red Diamond Rattlesnake** (*Crotalus ruber*). The northern red diamond rattlesnake is designated a CDFW SSC but is not federally or state listed. 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 in all suitable habitat areas on the project site. Surveys were conducted in accordance with survey guidelines 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 project 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 project 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 a California Fully Protected Species. 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. 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, provides 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 multilayered 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 forage onsite.

- **Special Status Bats**. Focused surveys were conducted 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. Though the project 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.

Regional Connectivity and Wildlife Movement Corridors

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 likely not persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information.

The project site is west of Carbon Canyon Regional Park and Chino Hills State Park and south of the Puente-Chino Hills wildlife corridor. The project site is not identified as a potential corridor segment for the Puente-Chino Hills wildlife corridor or as a habitat linkage contributing to Chino Hills State 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 for and is not expected to serve as a wildlife movement corridor for ground-dwelling species.

Habitat Conservation Plan

The project site is not 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.

5.4.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

B-1 Have a substantial effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

B-2 Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

B-3 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.

B-4 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.

B-5 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

B-6 Conflict with the provisions of an adopted habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

All six impacts will be addressed in the following analysis.

5.4.3 Plans, Programs, and Policies

Regulatory Requirements

PPP BIO-1 Potential direct/indirect impacts to common and sensitive bird and raptor species will require compliance with the California Fish and Game Code Section 3503. Construction outside the nesting season (between September 1st and January 31st) does not require preremoval 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 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 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 California Fish and Game Code. Any nest permanently vacated for the season would not warrant protection pursuant to the California Fish and Game Code.

PPP BIO-2 The proposed project is required to plant and maintain street trees in accordance with the City of Brea Municipal Code Chapter 12.20, Street Trees.

PPP BIO-3 The proposed project is required to comply with the California Building Code and all other applicable laws, rules, and regulations governing grading in the City of Brea.

PPP BIO-4 The proposed project will implement Design Guidelines and Development Regulations and Standards. All subsequent development within the Specific Plan area is required to conform with the provisions discussed in the design and development sections.

PPP HYD-2 The project applicant will obtain a Section 408 Permit from the U.S. Army Corps of Engineers to replace the Carbon Canyon Channel with a covered, reinforced concrete box to allow for construction of the new intersection at Rose Drive and Vesuvius Drive, build internal project streets, and complete Rose Drive according to the Master Plan of Arterial Highways.

5.4.4 Environmental Impacts

5.4.4.1 METHODOLOGY

To establish existing conditions for biological resources and determine how the proposed project may impact such resources, a literature review, review of jurisdictional resources, and field surveys were conducted. The field surveys included general surveys and focused surveys. Focused surveys were conducted for bats, the coastal California gnatcatcher, and burrowing owls.

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.

5.4.4.2 IMPACT ANALYSIS

The following impact analysis addresses the thresholds of significance; the applicable thresholds are identified in brackets after the impact statement.

Impact 5.4-1: The proposed project could have a substantial effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. [Threshold B-1]

Sensitive Vegetation Communities Impact

Table 5.4-9, *Vegetation Communities Impacts*, summarizes the direct impacts to the vegetation communities on site. Figure 5.4-6, *Vegetation Communities Impact Map*, shows the locations of these plant communities. Table 5.4-9 shows that 248.33 acres of vegetation communities, including 7.15 acres of onsite fuel modification zones (FMZ) would be directly impacted by implementation of the proposed project.

Table 5.4-9 Vegetation Communities Impacts

Vegetation Communities	Permanent Grading Impacts (ac)	Permanent FMZ Impacts (ac)	Open Space (ac)	Total (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 and 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	--	0.05	1.37
Walnut Grove Habitats				
California black walnut grove	--	--	0.07	0.07
Riparian Habitats				
Mule fat thickets	0.11	--	--	0.10
Black Willow thickets	0.03	--	--	0.03
Nonnative Grassland Habitats				
Red brome or Mediterranean grass grasslands	16.34	--	--	16.38
Ruderal Habitats				
Upland mustards	31.71	0.31	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

Table 5.4-9 Vegetation Communities Impacts

Vegetation Communities	Permanent Grading Impacts (ac)	Permanent FMZ Impacts (ac)	Open Space (ac)	Total (ac)
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	1.47	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	9.18	0.53	1.05	10.77
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	**248.33**	**7.15**	**7.21**	**262.70**

Source: Cadre 2019.

Of the vegetation communities in Table 5.4-9, four habitats are identified as special-status vegetation (see Table 5.4-2):

- Southern California Black Walnut Woodland
- Blue Elderberry Stands (not listed in the CNDDB for the subject quadrangles)
- Goodding's Black Willow Forest (not listed in the CNDDB for the subject quadrangles)
- Coast Prickly Pear (not listed in the CNDDB for the subject quadrangles)

Southern California Black Walnut Grove.: The project site contains 0.07 acre of walnut grove in the northeastern area of the project site east of Valencia Avenue. Walnut groves have a state rarity rank of S3. As shown on Figure 5.4-6, *Vegetation Communities Impact Map*, the black walnut grove is outside of the area to be graded and would not be disturbed by the proposed project through grading or fuel modification. Therefore, impacts to the black walnut grove would be less than significant.

Black Willow Thickets. The proposed project would impact approximately 0.03 acre of black willow thickets. Black willow thickets have a state rarity ranking of S3 (i.e., rare to uncommon). They are fully surrounded by a matrix of upland mustards, eucalyptus groves, and nonnative Mexican fan palms and thus do not exhibit functions typically associated with black willow forest. However, the CDFW considers impacts to alliances of S3 to be significant. Black willow thickets are within the northern reach of Drainage B, and impacts would be potentially significant.

Coast Prickly Pear Scrub. The area to be permanently graded by the proposed project includes approximately 0.12 acre of coast prickly pear scrub. Coast prickly pear scrub has a state rarity ranking of S3, rare to common. Because all coastal prickly pear occurs in small, scattered patches and is not associated with areas of native scrub habitat, impacts would be considered less than significant. Furthermore, approximately 0.08 acre of coast prickly pear scrub in FMZ would not be disturbed by the proposed project because cactus is permissible in FMZs. Therefore, impacts to coast prickly pear scrub habitat would be less than significant.

Blue Elderberry Woodlands. The proposed project would impact 1.37 acres of blue elderberry woodlands, which has a state rarity ranking of S3, rare to uncommon. The CDFW considers impacts to alliances of S3 to be significant; thus, impacts to 1.37 acres of blue elderberry would be potentially significant.

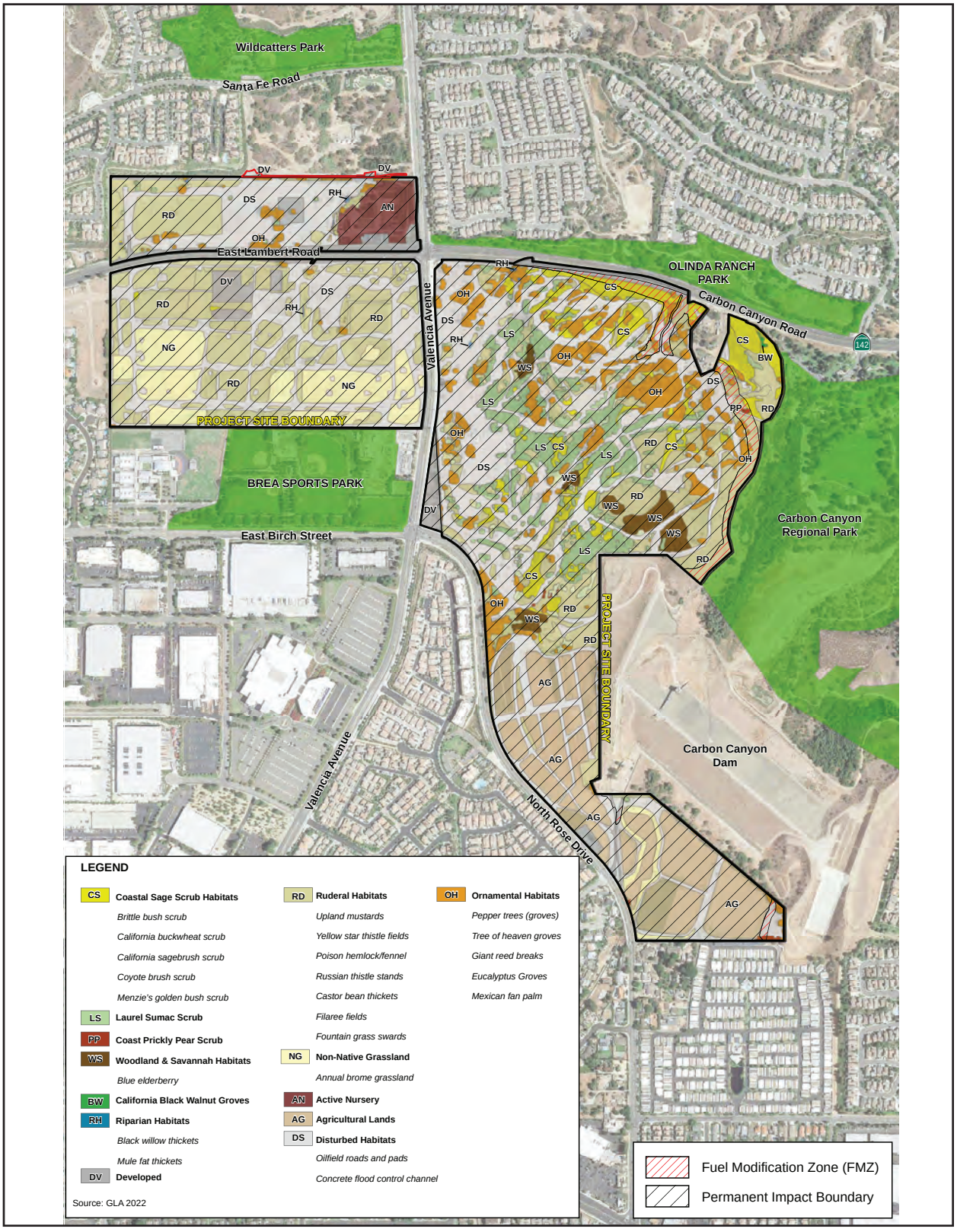
Sensitive Plants Impact

The proposed project would impact 126 Southern California black walnut plants, a special-status species, which is scattered across the northeastern portion of the project site east of Valencia Avenue (see Figure 5.4-5, *Sensitive Floral Species Observations Map*). On the northeastern edge of the project site, east of Valencia Avenue, 0.07 acre consists of a southern California black walnut grove. The California black walnut has a CRPR ranking of 4.2. The CRPR ranking of 4 refers to species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat (CRPR 4), and the threat rank of 0.2 refers to species that are fairly threatened in California (i.e., 20 to 80 percent occurrences threatened/moderate degree and immediacy of threat) (CNPS 0.2). However, direct impacts to the Southern California black walnut would be considered less than significant because 1) except for black walnut trees within 0.07 acre of walnut woodland, which would not be impacted, individual black walnut trees are commonly associated with disturbed habitat and areas of nonnative vegetation and do not exhibit functions that are typically associated with walnut woodland; 2) the black walnut tree has a CRPR ranking of 4, which is still common throughout its range; and 3) the black walnut tree is not locally rare, and the adjacent Chino Hills and nearby Puente and Whittier Hills, much of which is dedicated open space, support large numbers of California walnuts, ensuring that the population in north Orange County and adjacent areas of Los Angeles County are sustainable. Therefore, the loss of 126 walnut trees within the project site would not result in a substantial adverse impact to this species. Impacts would be less than significant.

Sensitive Wildlife Impact

The proposed project would directly impact the coastal California gnatcatcher, and it exhibits potential for impacts to the least Bell's vireo, yellow warbler, California horned lark, and Cooper's hawk. Figure 5.4-2, *Sensitive Faunal Species Observations Map*, show sighting of these sensitive animal species onsite.

Figure 5.4-6 - Vegetation Communities Impact Map
5. Environmental Analysis



Offsite Impact Area

0 1,000
Scale (Feet)

Source: CADRE Environmental, 2022

5. Environmental Analysis
BIOLOGICAL RESOURCES

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Coastal California Gnatcatcher. Two breeding pairs of coastal California gnatcatchers were detected on-site during focused surveys in 2018, as shown on Figure 5.4-2 and described in Section 5.4.1.3 under "Sensitive Wildlife." Coastal California gnatcatcher is a federally threatened and state species of special concern. Table 5.4-3 shows a 13.18 acres of PBF1 habitat and 44.24 acres of PBF2 habitat for a total of 57.42 acres of PBFs within the Critical Habitat. As shown in Table 5.4-10, *Impacts to CAGN Critical Habitat PBFs*, the proposed project would impact approximately 10.33 acres of suitable coastal scrub habitat that constitute PBF1 and 42.53 acres of other non-sage scrub habitats (grassland, blue elderberry, laurel sumac scrub, mulefat thickets, and upland thickets) that constitute PBF2, which are in close proximity to the coastal California gnatcatcher observations on-site. Although there are small, isolated patches of scrub alliances, such as coyote brush scrub and cactus scrub totaling 0.18 acre, they are in areas completely unsuitable for the coastal California gnatcatcher, are not within the critical habitat overlay, and are not included in the impacts for the gnatcatcher. Impacts to 10.33 acres of coastal California gnatcatcher habitat, including potential breeding and foraging resources, would be potentially significant.

Table 5.4-10 Impacts to CAGN Critical Habitat PBFs

Vegetation Alliance	PBF1 (acres)	PBF2 (acres)
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**
Total Area Impacted	**10.33 + 42.53 = 52.86 acres**	

Least Bell's Vireo. Sightings of the least Bell's vireo were detected within the project site during protocol coastal California gnatcatcher surveys in 2018, as shown on Figure 5.4-2 and described in Section 5.4.1.3 under "Sensitive Wildlife." The least Bell's vireo is a state and federally listed endangered species. Based on the observation of this species on the project site, impacts would be potentially significant.

Yellow Warbler. The yellow warbler is a state species of special concern. The yellow warbler was documented foraging on the project site near the southwest corner of the parcel east of Valencia Avenue, as shown on Figure 5.4-2 and described in Section 5.4.1.3 under "Sensitive Wildlife." Suitable habitat typically consists of multilayered riparian scrub or willow woodland corridors along flowing streams. The project's potential impacts to nesting habitat for the yellow warbler would be less than significant level with compliance with regulatory requirements of California Fish and Game Code Section 3503, as identified in PPP BIO-1.

California Horned Lark. The California horned lark is a CDFW Watch List species. The California horned lark was observed foraging within the grassland portions of the project site. Potential impacts to California

horned lark would be less than significant with compliance with regulatory requirements of California Fish and Game Code Section 3503, as identified in PPP BIO-1.

Cooper's Hawk. Cooper's hawk is a CDFW Watch List species when nesting. Cooper's hawk was observed foraging within the project site, and the mature eucalyptus trees represent suitable nesting habitat. Potential impacts to Cooper's hawk would be less than significant with compliance with the regulatory requirements of California Fish and Game Code Section 3503, as identified in PPP BIO-1.

Level of Significance Before Mitigation: Potentially significant impact.

Impact 5.4-2: The proposed project could have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; and could 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. [Thresholds B-2 and B-3]

Wetland Impact

The project 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. There would be no significant impacts on wetlands.

Jurisdictional Resources Impact

As shown in Table 5.4-11, *USACE/RWQCB Jurisdictional Resources Impact*, and discussed in Section 5.4.1.3 under "Jurisdictional Water and Wetlands," the project site contains 0.651 acre of USACE/RWQCB jurisdictional resources, and the proposed project would impact 0.602 acre of the total resource area. Figure 5.4-3, *USACE/RWQCB Jurisdictional Resources Map*, depicts the USACE/RWQCB jurisdictional drainage locations, and the proposed project would impact all of Drainages A through C, and 0.11 acre of Drainage D. Figure 15 in the Biological Resources Technical Report, "USACE/RWQCB Jurisdictional Resources Impact Map" (see Appendix D), shows drainage areas to be impacted by the proposed project. Impacts to these USACE/RWQCB jurisdictional resources would be potentially significant without mitigation, and a CWA Section 404 permit and a 401 Certification would be required prior to impacting these resources. Additionally, as required under PPP HYD-2, the project applicant will obtain a Section 408 Permit from the USACE to make alterations to the Carbon Canyon Channel (Drainage D) with a covered, reinforced concrete box.

Table 5.4-11 USACE/RWQCB Jurisdictional Resources Impact

		Existing Condition		Impacted Acreage	
Drainage Feature	Type	Acres	Linear Feet	Acres	Linear Feet
Drainage A	Nonwetland Channel	0.363	2,422	0.363	2,422
Drainage B	Nonwetland Ephemeral Channel	0.043	241	0.043	241
Drainage C	Nonwetland Ephemeral Channel	0.086	1,149	0.086	1,149
Drainage D	Concrete Ephemeral Channel	0.159	687	0.11	447
	Total	**0.651**	**4,499**	**0.602**	**4,259**

As shown in Table 5.4-12, *CDFW Jurisdictional Resources Impact*, the project site contains 1.055 acres of CDFW jurisdictional resources, which includes 0.992 acre of nonriparian streambed and 0.063 acre of riparian habitat. Figure 5.4-4, *CDFW Jurisdictional Resources Map*, depicts the CDFW jurisdictional drainage locations. The proposed project would impact 1.006 acres of CDFW jurisdictional resources, consisting of all of Drainages A through C and 0.11 acre of the concrete channel (Drainage D). Impacts on the 0.11-acre concrete channel would not be considered significant because there are no streambed resources associated with it. Therefore, the proposed project would have potentially significant impacts to 0.896 acre of streambed, of which 0.63 acre consists of riparian habitat. Figure 16 of the Biological Resources Technical Report, "CDFW Jurisdictional Resources Impact Map" (see Appendix D), shows the impacted areas. Impacts to these CDFW jurisdictional resources would be potentially significant without mitigation, and a 1602 Streambed Alteration Agreement from CDFW would be required prior to impacting these resources.

Table 5.4-12 CDFW Jurisdictional Resources Impact

Drainage Feature	Existing Condition				Impacted Acreage			
	Non-Riparian Streambed	Riparian	Total Acres	Linear Feet	Non-Riparian Streambed	Riparian	Total Acres	Linear Feet
Drainage A	0.699	0.032	0.731	2,422	0.699	0.032	0.731	2,422
Drainage B	0.048	0.031	0.079	241	0.048	0.031	0.079	241
Drainage C	0.086	0.00	0.086	1,149	0.086	0.00	0.086	1,149
Drainage D	0.159	0.00	0.159	687	0.11	0	0.11	474
Total	**0.992**	**0.063**	**1.055**	**4,499**	**0.943**	**0.063**	**1.006**	**4,286**

Coastal California Gnatcatcher Critical Habitat Impact

The proposed project would impact areas within Critical Habitat Unit 9, a sensitive natural community designated for the coastal California gnatcatcher by the USFWS. 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 to the north of the project site, as depicted on Figure 5.4-7, *Regional Open Space and Proposed Mitigation Lands Map*. As discussed in Impact 5.4-1 under Coastal California Gnatcatcher impact and summarized in Table 5.4-10, the proposed project would impact 10.33 acres of PBF1 and 42.53 acres of PBF2, totaling 52.86 acres within Critical Habitat Unit 9. Impacts to the 52.86 acres of coastal California gnatcatcher critical habitat would be potentially significant.

Level of Significance Before Mitigation: Potentially significant impact.

Impact 5.4-3: The proposed project could interfere substantially with the movement of 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. [Threshold B-4]

Wildlife Corridor

As discussed in Section 5.4.1.2, *Existing Conditions,* the project site is not in a designated wildlife corridor or linkage. The project site is adjacent to residential development along the north, south, and west boundaries. Additionally, high traffic roadways bisect and border the project site. The project site does not meet the definition of a wildlife movement corridor, nor is it expected to serve as one for ground-dwelling species.

However, the project site is partially within Critical Habitat Unit 9, designated for the coastal California gnatcatcher by the USFWS. As discussed under Impact 5.4-2, 52.86 acres of critical habitat representing PBFs would be impacted by the proposed project. Therefore, implementation of the proposed project could interfere with the movement of the coastal California gnatcatcher, and such impacts would be potentially significant.

Nesting Birds

The proposed project has the potential to impact active bird and raptor nests if vegetation is removed during the nesting season, which generally extends from February 1st to August 31st. However, migratory, nongame, native bird species are protected by the MBTA and California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800. PPP BIO-1 requires that the proposed project avoid the incidental loss of fertile eggs or nestlings or other activities that could lead to nest abandonment; therefore, preconstruction surveys would be conducted prior to removal of nesting habitat if construction-related vegetation removal occurs during nesting season (February 1 to August 31). Implementation of PPP BIO-1 would reduce impacts to nesting birds to a less than significant level.

Level of Significance Before Mitigation: Potentially significant impact.

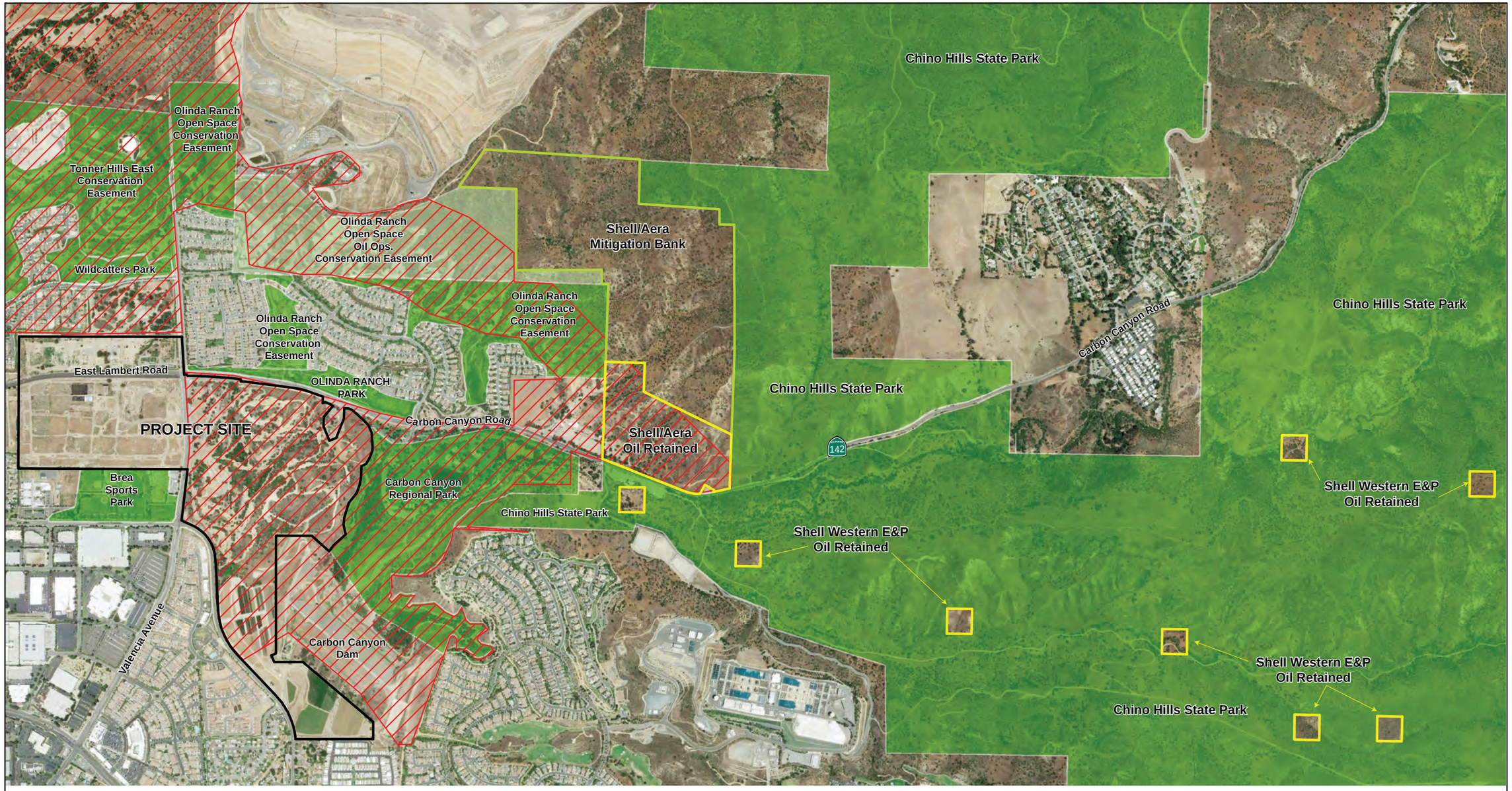
Impact 5.4-4: The proposed project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. [Thresholds B-5]

Consistency with Local Biological Resources Policies

The proposed project is in the City of Brea and unincorporated Orange County. However, after approval of Brea 265 Specific Plan and the Development Agreement, the 219.1 acre portion of the project area that is currently within the City's SOI would be annexed into the City, consistent with the 2005 preannexation agreement. At that time, the proposed project would be subject to Brea's policies and ordinances.

The community resources element of the City's General Plan provides provisions for open space and biological resources. Table 5.4-13, *Consistency Analysis with General Plan Community Resources Element*, analyzes the project's consistency with the General Plan.

Figure 5.4-7 - Regional Open Space and Proposed Mitigation Lands Map
5. Environmental Analysis



Source: CADRE Environmental, 2022

5. Environmental Analysis
BIOLOGICAL RESOURCES

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Table 5.4-13 Consistency Analysis with General Plan, Community Resources Element

Goals / Policies	Consistency Analysis
▪ **Goal CR-4:** 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. • **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. • **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.	***Consistent:*** The proposed project would provide 47.5 acres of open space and an additional 15.1 acres of land as parks and recreation space onsite. Although the project site does support sensitive habitat in undeveloped areas onsite, the project site is currently zoned HR (Hillside Residential) and R-1 Single-Family Residential, and is not zoned for open space. The proposed project would protect and preserve open space wherever possible for diverse purposes.
▪ **Goal CR-8:** Preserve and maintain wildlife and animal movement corridors • **Policy CR-8.1.** Preserve key wildlife migration corridors and habitat areas. • **Policy CR-8.2:** Provide adequate wildlife crossings where roadways have severed habitat areas. • **Policy CR-8.3.** Cooperate with regional agencies and authorities with similar goals in protecting and enhancing wildlife and animal movement corridors. • **Policy CR-8.4.** Regular monitoring of medium and large mammals is necessary to gauge the effective ness of wildlife corridors and to identify or increases in wildlife populations.	***Inconsistent:*** As discussed under Impact 5.4-4, the project site is not within an identified wildlife corridor nor is the project site a habitat linkage. However, the project site is in Critical Habitat Unit 9 for the coastal California gnatcatcher. Therefore, the proposed project may conflict with the City's community resources element.
▪ **Goal CR-9:** 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. • **Policy CR-9.2.** Preserve the integrity of blue line streams and riparian habitat areas. • **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. • **Policy CR-9.4.** Protect sensitive plant species resources from the impacts of development • **Policy CR-9.5.** Manage areas of diverse wildlife habitat as a natural resource and prevent major destruction or disruption. • **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.	***Inconsistent:*** The project site is currently designated Hillside Residential and Low Density Residential, and zoned HR (Hillside Residential) and R-1 Single-Family Residential. It is not designated as open space. However, the implementation of the proposed project may impact open space, natural habitat, vegetation communities, sensitive flora and fauna, and USACE, RWQCB, and CDFW resources, as discussed in Impacts 5.4-1 through 5.4-4, if not mitigated. Therefore, the proposed project may conflict with the City's community resources element.

Sources: City of Brea General Plan Community Resources Element; Brea 265 Specific Plan, 2019.

As described in Table 5.4-13, the proposed project would be inconsistent with some of the General Plan policies protecting biological resources, and impacts would be potentially significant.

Tree Preservation Ordinance

The proposed project is required to plant and maintain street trees in accordance with the City of Brea Municipal Code Chapter 12.20, Street Trees (PPP BIO-2). There is no other tree preservation policy applicable to the proposed project.

Level of Significance Before Mitigation: Potentially significant impact.

Impact 5.4-5: The proposed project would not conflict with the provisions of an adopted habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. [Thresholds B-6]

The project site is not within an adopted HCP nor NCCP. However, a 141.40-acre portion of the project site east of Valencia Avenue is in Critical Habitat Unit 9 for the coastal California gnatcatcher, as depicted in Figure 5.4-2, *Sensitive Faunal Species Observations Map*. The area designated critical habitat consists of an active oil field that supports a predominance of nonnative trees, including blue gum eucalyptus and Peruvian pepper, mixed with laurel sumac chaparral and limited areas of coastal sage scrub. The project site also contains substantial areas devoted to oil production activities, including unvegetated roads and pads. The portion of the project site designated critical habitat is bordered on the north by existing residential development and Valencia Avenue, and former nursery lands to the west that support nonnative grasses and forbs as well as residential and institutional lands west of Valencia Avenue. Areas to the south of the critical habitat include active agricultural areas (some of which are in the critical habitat overlay) and residential development. To the east is Carbon Canyon Regional Park and USACE-owned land associated with Carbon Canyon Dam that supports very limited areas of coastal sage scrub habitat. The project site has been used for oil extraction for more than 100 years, and with or without the proposed project, abandonment and remediation of the oil production facilities would unavoidably have impacts to the habitat. Implementation of the proposed project would provide a method to accelerate restoration through mitigation that otherwise would not be possible for a long time.

As discussed in Impact 5.4-1 and Impact 5.4-2, of the 141.40 acres of critical habitat, 83.98 acres (59.39 percent) do not contain PBFs, and 57.42 acres (40.61 percent) contain PBFs. Table 5.4-3, *Coastal California Gnatcatcher PCE Assessment*, provides a detailed breakdown of the 141.40 acres of critical habitat. And as summarized in Table 5.4-10, the project would impact 10.33 acres of PBF1 and 42.53 acres of PBF2, totaling 52.86 acres. Impacts to the 52.86 acres of coastal California gnatcatcher critical habitat would be potentially significant.

Level of Significance Before Mitigation: Potentially significant impact.

5.4.5 Cumulative Impacts

The geographical area for cumulative analysis would encompass areas near the Chino Hills State Park and the Puente-Chino Hills wildlife corridor area, which includes the related cumulative projects list identified in Table 4-1, *Related Cumulative Projects*. Implementation of the proposed project could result in site-specific impacts to sensitive flora and fauna species, sensitive vegetation communities, critical habitat designated for coastal California gnatcatcher, and jurisdictional waters. Similar to the proposed project, each cumulative project would be reviewed on a case-by-case basis for its impact on biological resources and would be expected to comply

with existing regulations and local and regional plans, ordinances, and policies protecting biological resources, as listed in PPP BIO-1 through PPP BIO-3. Based on a review of USFWS's critical habitat map, none of the related projects are within critical habitat for the coastal California gnatcatcher (USFWS 2019), in the identified wildlife corridor, or in habitat linkage for the Puente-Chino Hills Wildlife Corridor and Chino Hills State Park. Although project-related biological resources could be cumulatively significant—because overall conversion of undeveloped natural habitats to urban uses could result in decrease of availability of open space—implementation of mitigation measures for each project would ensure that individual project impacts are reduced to a less than significant level, and none of the cumulative projects are in close enough proximity to combine with the proposed project to create a cumulative impact on biological resources.

5.4.6 Level of Significance Before Mitigation

Without mitigation, these impacts would be **potentially significant**:

- **Impact 5.4-1**: Buildout of the proposed project may impact the two sensitive vegetation communities (Black Willow Thickets and Blue Elderberry Woodlands) and two sensitive wildlife species—coastal California gnatcatcher and least Bell's vireo.
- **Impact 5.4-2:** The proposed project could result in the loss 0.602 acre of USACE/RWQCB jurisdictional resources and 1.006 acres of CDFW jurisdictional resources.
- **Impact 5.4-3:** The proposed project could affect wildlife movement of the coastal California gnatcatcher.
- **Impact 5.4-4:** The proposed project may be inconsistent with General Plan policies protecting biological resources.
- **Impact 5.4-5:** The proposed project would impact USFWS critical habitat for coastal California gnatcatcher.

5.4.7 Mitigation Measures

Impact 5.4-1

BIO-1 The project applicant shall provide a minimum of 52.86 acres of open space lands offsite within and immediately adjacent to the existing Puente-Chino Hills wildlife corridor as determined by the U.S. Fish and Wildlife Service, which may include properties owned by SWEPI/Aera Energy that are within or adjacent to the Chino Hills State Park. The proposed land conservation shall be offered to the Chino Hills State Park for consideration of acquisition. See Figure 5.4-7, *Regional Open Space and Proposed Mitigation Lands Map*.

BIO-2 A Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA) or Biological Opinion pursuant to Section 7 shall be developed as part of formal consultation with the US Fish and Wildlife Service (USFWS) for

impacts to 10.33 acres of occupied and suitable coastal California gnatcatcher habitat. Upon development of the HCP or completion of the Section 7 consultation and issuance of the Biological Opinion, the USFWS can issue incidental take permits for listed species where the HCP or Biological Opinion 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 in accordance with the HCP or the Biological Opinion, as applicable.

The project applicant shall perform the following restoration activities offsite within the 52.86 acres proposed for dedication within and immediately adjacent to the existing Puente-Chino Hills wildlife corridor, as determined by the U.S. Fish and Wildlife Service, which may include properties owned by SWEPI/Aera Energy that are within or adjacent to the Chino Hills State Park, as outlined in Mitigation Measure BIO 1:

- Coastal Sage Scrub Establishment/Restoration (10.33 acres mitigated at 2:1 ratio): 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 project 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).

It is expected that the USFWS will 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, is not permitted from February 15 through July 1. Therefore, grading and removal of habitat during this time frame shall only be permitted if the following conditions are met to the satisfaction of the USFWS.

- 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 are implemented to the satisfaction of the USFWS. 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 15 and July 1, the project applicant shall provide to the City of Brea a letter from a qualified biologist retained by the project 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 that 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 in the area to be cleared or graded, or in coastal sage scrub habitat within 500 feet of such an 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 15 through July 1.

- If coastal California gnatcatchers are nesting within the area to be graded/cleared, or within coastal sage scrub habitat within 500 feet of said area, no grading will be allowed during this time until mitigation measures are implemented to the satisfaction of the USFWS.
- The biologist must attend the City's preconstruction 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 that area for any evidence that a coastal California gnatcatcher nest(s) exists or is being built. If evidence of a coastal California gnatcatcher nest(s) is discovered, the grading operation shall cease in that area and be directed to a location more than 500 feet 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 in the area and any habitat within 500 feet of the area.

BIO-3 A Habitat Conservation Plan (HCP) pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act (FESA) or Biological Opinion pursuant to Section 7 shall be developed as part of formal consultation with the US Fish and Wildlife Service (USFWS) for impacts to 1.37 acres of least Bell's vireo habitat. Upon development of the HCP or completion of the Section 7 consultation and issuance of the Biological Opinion, the USFWS can issue incidental take permits for listed species where the HCP or Biological Opinion 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)

other measures that the USFWS or CDFW may require as being necessary or appropriate for the HCP or Biological Opinion.

The project applicant shall perform the following preservation and/or restoration activities offsite within the 52.86 acres proposed for dedication within and immediately adjacent to the existing Puente-Chino Hills wildlife corridor as determined by the USFWS, which may include properties owned by SWEPI/Aera Energy that are within or adjacent to the Chino Hills State Park, as outlined in Mitigation Measure BIO-1.

- Blue Elderberry Scrub Establishment (1.37 acres mitigated at 2:1 ratio): 2.74 acres
- Prepare Habitat Restoration Plan that shall include the following components—Location, Site Preparation Methods, Plant Palette, Planting Methods, Maintenance Requirements, Monitoring and Reporting Procedures, Performance Standards.

It is expected that the USFWS will 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, is not permitted from April 14 through July 31. Therefore, grading and removal of habitat during this time frame shall only be permitted if the following conditions are met to the satisfaction of the USFWS.

- During grading, if active nests are found within 500 feet of the grading, the grading activity shall stop until mitigation measures are implemented to the satisfaction of the USFWS. There is no guarantee that grading will be allowed to resume during the nesting season.

Impact 5.4-2

See Mitigation Measures BIO-1 and BIO-2.

BIO-4 Prior to issuance of a grading permit, the project applicant shall obtain a 404 Nationwide Permit from the US Army Corps of Engineers (USACE), a 401 Certification issued by the Regional Water Quality Control Board (RWQCB), and a 1602 Streambed Alteration Agreement (SAA) from the California Department of Fish and Wildlife (CDFW) for impacts to jurisdictional resources. During the permit/certification processes, a Regulatory Habitat Mitigation Monitoring Plan (HMMP) shall be developed and approved by USACE, CDFW, and RWQCB, as outlined in the HMMP.

Total impact area that requires mitigation by 404 Nationwide Permit from USACE and 401 Certification from RWQCB shall not be less than 0.602 acre. And total impact area subject to Section 1602 SAA by CDFW mitigation shall not be less than 0.896 acre (0.833 acre of drainage channel and 0.063 acre of riparian habitat). Total impact area subject to Section 1602 SAA is inclusive of the USACE/RWQCB impact area; therefore, mitigation for Section 1602 impacts also address the impacts to USACE/RWQCB jurisdictional resources.

Impacts to jurisdictional resources shall be mitigated at a ratio greater than 3:1 (0.896 acre mitigated at 3:1 ratio is 2.688 acres). The project applicant shall establish and/or reestablish 2.74 acres of streambed and associated blue elderberry woodland as outlined in Mitigation Measure BIO-3. The 2.74 acres will collectively mitigate impacts to 0.896 acre of jurisdictional resources, 1.37 acres of blue elderberry woodland, and 0.03 acre of black willow thicket at a location approved by CDFW and the RWQCB within the 52.86 acres proposed for dedication within and immediately adjacent to the existing Puente-Chino Hills wildlife corridor, which may include properties owned by SWEPI/Aera Energy that are within or adjacent to the Chino Hills State Park, as outlined in Mitigation Measure BIO 1.

Regulatory Habitat Mitigation Monitoring Plan

If restoration mitigation (as stated above) is selected, the project applicant shall develop a Regulatory Habitat Mitigation Monitoring Plan (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 USACE, CDFW, and RWQCB. The project applicant shall begin restoration activities (e.g., soil prep, seeding, planting) no later than one year after issuance of the first permit that allows ground disturbance (e.g., grading permit). The project 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 shall 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.

Impact 5.4-3

See Mitigation Measures BIO-1 through BIO-3.

Impact 5.4-4

See Mitigation Measures BIO-1 through BIO-4.

Impact 5.4-5

See Mitigation Measures BIO-1 and Mitigation Measures BIO-2.

5.4.8 Level of Significance After Mitigation

Impact 5.4-1

With implementation of Mitigation Measures BIO-1 though BIO-3, potential impacts to special status vegetation communities and wildlife species would be reduced to a less than significant level. This impact is not significant and unavoidable.

Impact 5.4-2

With implementation of Mitigation Measures BIO-1, BIO-2, and BIO-4, impacts to riparian habitat, jurisdictional waters, and other sensitive habitats, including the coastal California gnatcatcher critical habitat, would be reduced to a less than significant level. This impact is not significant and unavoidable.

Impact 5.4-3

With implementation of PPP BIO-1 and Mitigation Measures BIO-1 through BIO-3, potential impacts to migratory and nesting birds, including migratory movement of the coastal California gnatcatcher, would be reduced to a less than significant level. This impact is not significant and unavoidable.

Impact 5.4-4

With implementation of Mitigation Measures BIO-1 through BIO-4, potential impacts related to biological resources would be reduced to a less than significant level; thus, inconsistencies with some of the General Plan policies protecting biological resources would be reduced to a less than significant level. This impact is not significant and unavoidable.

Impact 5.4-5

With implementation of Mitigation Measures BIO-1 and BIO-2, the proposed project would not conflict with the USFWS's coastal California gnatcatcher critical habitat, and impacts would be less than significant. This impact is not significant and unavoidable.

5.4.9 References

Cadre Environmental. 2022, January. Biological Resources Technical Report: Brea 265 Specific Plan City of Brea, Orange County, California.

Conservation Biology Institute (CBI). 2005. Maintaining Ecological Connectivity Across the "Mission Middle" of the Puente-Chino Hills Wildlife Corridor.

United States Fish and Wildlife Service. ECOS: Environmental Conservation Online System Online Mapper. https://ecos.fws.gov/ecp/report/table/critical-habitat.html.