Appendix E. Biological Resources Technical Report

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Biological Resources Technical Report

Brea 2050: Focused General Plan Update and Brea Core Specific Plan Project

February 2026

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Acronyms and Abbreviations

amsl	above mean sea level
BMP	best management practice
BCSP	Brea Core Specific Plan
BIOS	Biogregraphic Information Observation System
CCE	California candidate endangered species
CDFW	California Department of Fish and Wildlife
CE	California endangered
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
City	City of Brea
CRPR	California Rare Plant Rank
CT	California threatened
CWA	Clean Water Act
FE	federally endangered
FT	federally threatened
GIS	geographic information system
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
MCV	Manual of California Vegetation
NCCP	Natural Community Conservation Planning
NPDES	National Pollutant Discharge Elimination System
PEIR	Program Environmental Impact Report
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	Brea 2050: Focused General Plan Update and Brea Core Specific Plan Project
RWQCB	Regional Water Quality Control Board
SR-	State Route
SSC	species of special concern
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WL	California Department of Fish and Wildlife watch list

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Executive Summary

At the request of the City of Brea (City), Harris & Associates has prepared this Biological Resources Technical Report for the Brea 2050: Focused General Plan Update and Brea Core Specific Plan Project (Project) Program Environmental Impact Report (PEIR).

The Project aims to update the 2003 Brea General Plan, specifically the Community Development (land use, circulation, economic development), Community Resources (open space), Community Services (recreation, education, cultural arts), and Public Safety chapters. At the time of its preparation, the 2003 Brea General Plan was based on forecasting and projections with a horizon year of 2020. Therefore, it is no longer a visioning document for the community and requires an update. The Focused GPU would allow for additional housing units and non-residential square footage across various land use categories within the incorporated City limits and would continue to allow for limited housing units in the unincorporated sphere of influence, consistent with the 2003 Brea General Plan.

This report presents the documented biological resources known to occur in the project area; identifies potential impacts to sensitive biological resources; documents potential jurisdictional aquatic resources; and recommends avoidance, minimization, or mitigation measures consistent with federal, state, and local rules and regulations.

The biological resources impacts analysis was prepared in accordance with the California Environmental Quality Act (CEQA) of 1970 and the CEQA Guidelines (as amended). This report is a technical study in support of the PEIR.

The biological resources documented as present or with potential to occur in the project area were identified through a review of existing maps, literature and other biological studies conducted in the area, and sensitive species occurrence databases. No biological survey, field reconnaissance, aquatic resources delineation, or focused species surveys were conducted as a part of this project. The results of this review provide information on the potential constraints to Project development due to the presence of sensitive biological resources.

Eight vegetation communities and three land cover types are documented within the Project area. The vegetation communities include fresh water, freshwater emergent wetland, non-vegetated channel, cismontane woodland, riparian forest/scrub, annual grassland, chaparral, and coastal scrub, all of which are considered sensitive. The three land cover types include agriculture, disturbed, and urban/developed land, none of which are considered sensitive.

A total of ten sensitive plant species and 20 sensitive wildlife species have been documented in the Project area. Critical habitat for one sensitive wildlife species occurs in the Project area.

Project implementation would result in potentially significant direct and indirect impacts to sensitive plant and wildlife species (including nesting birds and raptors, sensitive roosting bats, and critical habitat), sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages. Impacts resulting from conflicts with local policies, ordinances, or regional conservation plans protecting biological resources would be less than significant.

Implementation of Mitigation Measures BIO-1 through BIO-4 would reduce direct and indirect Project impacts to the sensitive plant species with potential to occur and their critical habitat to below a level of significance.

Implementation of Mitigation Measures BIO-3 through BIO-7 would reduce direct and indirect Project impacts to the sensitive wildlife species with potential to occur and their critical habitat to below a level of significance. Further, direct and indirect impacts to sensitive nesting birds and raptors and sensitive roosting bats would be mitigated to below a level of significance with implementation of Mitigation Measures BIO- 3 through BIO-7.

Implementation of Mitigation Measures BIO-3 and BIO-5 would reduce direct and indirect impacts to sensitive vegetation communities to below a level of significance.

Implementation of Mitigation Measures BIO-3 through BIO-5, BIO-8, and BIO-9 would reduce direct and indirect impacts to potentially jurisdictional aquatic resources to below a level of significance.

Implementation of Mitigation Measures BIO-3 through BIO-6 would reduce direct and indirect impacts to wildlife movement corridors and habitat linkages to below a level of significance.

No Habitat Conservation Plan or NCCP Plan has been adopted in or adjacent to the Project area. Therefore, no impacts to local conservation plans would occur from the implementation of the Project.

Implementation of the Project would not result in cumulative impacts to biological resources because impacts would be reduced to below a level of significance with implementation of Mitigation Measures BIO-1 through BIO-9.

Section 1 Introduction

This Biological Resources Technical Report (BRTR) for the proposed Brea 2050: Focused General Plan Update (Brea 2050 or Focused GPU) and Brea Core Specific Plan (BCSP) Project (Project) Program Environmental Impact Report (PEIR) documents the biological resources in the City of Brea and its Sphere of Influence (SOI) and addresses at a programmatic level the potential biological resources impacts associated with the construction and operation of the Project for the City of Brea. Note that the City of Brea, as a governmental entity, is referred to as the "City," while the geographical area of the incorporated City of Brea is referred to as the "city."

1.1 Project Description

The purpose of the Focused GPU is to create a policy framework that outlines the City's long-term physical form and development while preserving and enhancing the quality of life for the City's residents. The Focused GPU seeks to adapt the 2003 Brea General Plan, specifically the Community Development (land use, circulation, economic development), Community Resources (open space), Community Services (recreation, education, cultural arts), and Public Safety chapters, with an emphasis on the land use and circulation components. At the time of its preparation, the 2003 Brea General Plan was based on forecasting and projections with a horizon year of 2020. As such, it is no longer a visioning document for the community and requires an update. The Focused GPU would allow for additional housing units and non-residential square footage across various land use categories within the incorporated City limits and would continue to allow for limited housing units in the unincorporated sphere of influence, consistent with the 2003 Brea General Plan.

The Project also includes a new specific plan, Brea Core Specific Plan (BCSP), which would implement the values identified in the 2017 Brea Envisions and the goals, policies, and recommendations of the 2020 Core Active Transportation Plan. The BCSP would establish land uses, provide mobility recommendations and streetscape improvements, propose infrastructure upgrades to support proposed development, and outline implementation strategies for the BCSP area. The BCSP would also allow for the development of 4,752 residential units and 6,379,588 square feet of non-residential uses within the BCSP area.

1.1.1 Project Location

The Project area includes the incorporated City of Brea and its Sphere of Influence (SOI), collectively referred to as the Project area, and is located within northeastern Orange County, California. The city is bordered by unincorporated Orange County land and the Los Angeles County line to the north; Chino Hills State Park and the San Bernardino County line to the east; the Cities of Yorba Linda, Placentia, and Fullerton to the south; and the City of La Habra to the west (Appendix A, Figures; Figure 1, Regional Location and Figure 2, Project Area). The Project

area encompasses approximately 22.6 square miles and is composed of diverse natural habitats and residential communities.

The Project area also includes the BCSP area, located in the southwestern portion of the City. The BCSP is generally bounded by Lambert Road to the north, Imperial Highway (SR-90) to the south, Berry Street to the west, and SR-57 and Associated Road to the east.

1.2 Purpose

At the request of the City, Harris & Associates has prepared this Biological Resources Technical Report for the Project. The purpose of this Biological Resources Technical Report is to present documented biological resources known to occur in the Project area; identify potential impacts to sensitive biological resources; document potential jurisdictional aquatic resources; and recommend avoidance, minimization, or mitigation measures consistent with federal, state, and local rules and regulations.

1.3 Environmental Setting

The following is a description of the existing conditions in the Project area.

1.3.1 Land Use

The Project area is largely developed, and contains various residential, commercial, and industrial development. Various parks/recreation spaces are scattered throughout the Project area, and large areas of open space occur in the hills to the east of Valencia Avenue (SR-142). Other uses include cemetery, public facilities, and mixed use.

1.3.2 Topography and Soils

The City of Brea is bounded to the north and east by the lower Transverse Ranges, near the boundary of eastern Los Angeles County. The northern and eastern portions of the City generally contain gently to moderately steep slopes and ridges, and the unincorporated Sphere of Influence area contains primarily steep slopes and ridges. To the south and west, within the City, the topography is generally flat, forming part of the Coastal Plain of Orange County (Figure 3, USGS Topographic Map). Elevation in the City ranges from approximately 350 to 1,200 feet above mean sea level (amsl), while the elevation in the sphere of influence ranges from approximately 450 to 1,325 feet amsl. The Project area lies within several quadrangles of the California Geological Survey Map, including Prado Dam, La Habra, and Yorba Linda Quadrangles.

A total of 40 soil types are present in the Project area, including Alo clay, Alo variant clay, Anaheim clay loam, Anaheim loam, Apollo warm-Calleguas complex, Balcom clay loam, Blasingame-rock outcrop complex, Bosanko clay, Calleguas clay loam, Capistrano sandy loam, Cieneba sandy loam – eroded, Cieneba-Friant sandy loams complex, Cieneba-rock outcrop complex, Cropley clay, dam, Fontana clay loam, Gaviota-Chumash-rock outcrop complex, Marina

loamy sand, Metz loamy sand, Mocho loam, Myford sandy loam, Myford sandy loam - eroded, Myford sandy loam – thick surface, Nacimiento clay loam, Omni clay, Rincon clay loam, riverwash, rock outcrop-Cieneba complex, San Emigdio fine sandy loam, Soper cobbly loam, Soper gravelly loam, Soper loam, Soper-rock outcrop complex, Sorrento clay loam, Sorrento loam, water, Xeralfic arents – loamy, Xerorthents loamy - cut and fill areas, Yorba cobbly sandy loam, and Zaca-Apollo - warm complex (Figure 4, Soils; USDA 2025a; USDA 2025b).

1.3.3 Hydrology

The Project area occurs within two watersheds, Coyote Creek watershed and the Santa Ana River watershed (H_2OC Stormwater Program 2025). Together, these watersheds cover approximately 252 acres of land, and occur in Orange, San Bernardino, and Los Angeles counties. Both watersheds capture flows which drain west into the Pacific Ocean. The primary waterways in these watersheds include the Coyote Creek, Brea Creek, Fullerton Creek, Santiago Creek, and the Santa Ana River. Irvine lake, a reservoir located in Silverado, California, is present in the Santa Ana River Watershed.

Figure 5, Hydrology, identifies the major hydrologic features documented in the vicinity of the Project area (USFWS 2025a; USGS 2025). Of the major hydrologic features documented in the region, the Santa Ana River is defined as traditional navigable waters by the U.S. Army Corps of Engineers (USACE) and is located immediately south and southwest of the Project area (USACE 2025). Many of the other rivers and streams, as well as numerous creeks and drainages, are tributary to these traditional navigable waters or have direct connections to the Pacific Ocean.

1.3.4 Climate

On a regional level, the Project area has a Mediterranean climate, which is characterized by wet winters and warm, dry summers Habitats in this region include both mesic (moist) habitats and xeric (dry) habitats. Generalized climate in the region is characterized by warm, dry summers and cold, moist winters, which pushes the growing season to the wet months of the year (late winter to early spring). Vegetation often goes dormant (senescent) during the later summer months until initial rains start in the late fall. The rainy season in the Project area typically lasts from November through April and has an annual winter precipitation average of approximately 14 inches (Western Regional Climate Center 2025).

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Section 2 Methods

Biological resources documented as present or with potential to occur in the Project area were identified through a review of existing maps, literature and other biological studies conducted in the area, and sensitive species occurrence databases. No biological survey, field reconnaissance, aquatic resources delineation, or focused species surveys were conducted as a part of this Project. The results of this review provide information on the potential constraints to Project development due to the presence of sensitive biological resources. The potential presence of critical habitat in the Project area was also analyzed.

2.1 Literature Review

The following documents and databases were reviewed

- Calflora Database (Calflora 2025)
- Consortium of California Herbaria database (CCH 2025)
- The CNPS Rare Plant Program Inventory of Rare Plants (CNPS 2025)
- California Natural Diversity Database (CDFW 2025a)
- CDFW Biogeographic Information and Observation System (CDFW 2025b)
- U.S. Department of Agriculture Soil Survey (USDA 2019)
- USFWS Information for Planning and Consultation (IPaC) (USFWS 2025b)
- USFWS NWI Wetlands Mapper (USFWS 2025a)
- USGS National Hydrography Dataset (NHD) (USGS 2025)

2.2 Vegetation Mapping

Vegetation community boundaries for the Project area were obtained in geographic information system (GIS) format from the California Department of Fish and Wildlife (CDFW) Biogeographic Information and Observation System (BIOS) (CDFW 2025b). Approximately 21 acres of land was not mapped in the BIOS database and was extrapolated based on aerial imagery.

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Section 3 Results

The results presented in this section provide data from the literature and database review conducted for the Project area. For the purposes of this Biological Resources Technical Report, sensitive biological resources are those defined as follows: (1) species designated as endangered, threatened, rare, protected, sensitive, or species of special concern according to the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS), or applicable regional plans, policies, or regulations needs due to limited distribution, limited numbers, or significant population declines associated with natural or human-made causes; (2) species and habitat types recognized by local and regional resource agencies as special status; (3) habitats or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; or are identified as sensitive in regional or local plans, policies, or regulations, or by the USFWS or CDFW (4) wildlife corridors and habitat linkages; or (5) biological resources that may or may not be considered special status but are regulated under local, state, or federal laws.

3.1 Vegetation Communities and Land Cover Types

Vegetation community types are categorized into general overarching habitat categories under which the Manual of California Vegetation (MCV) alliances (Sawyer et. al. 2009) are described. Alliances listed in the Project area are based on the U.S. National Vegetation Classification System (USNVC) data reported by BIOS. The Project area consists of eight habitats and three land cover types, including fresh water, freshwater emergent wetland, non-vegetated channel, cismontane woodland, riparian forest/scrub, annual grassland, chaparral, coastal scrub, agricultural land, disturbed land, and urban/developed land (Table 1). The eight vegetation communities documented in the Project area include MCV alliances with vegetation associations that are considered sensitive by CDFW (2025c). Other vegetation communities may be considered sensitive because impacts to these habitats are often regulated by the USFWS, CDFW, USACE, or Regional Water Quality Control Board (RWQCB). The three land cover types, agricultural land, disturbed land, and urban/developed land, are not considered sensitive.

The following sections describe the documented vegetation communities and land cover types in the Project area. These are summarized in Table 1, Vegetation Communities and Land Cover Types in the Planning Area and illustrated in Figure 6, Vegetation and Land Cover Types.

Table 1. Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community and Land Cover Type	Acres
Wetlands and Waters	
Fresh Water[1]	14.40
Freshwater Emergent Wetland[1]	35.81
Non-Vegetated Channel[1]	25.01

Table 1. Vegetation Communities and Land Cover Types in the Project Area

Vegetation Community and Land Cover Type	Acres
Riparian Forest/Scrub[1]	604.04
Upland Habitats	
Cismontane Woodland[1]	886.77
Grassland	
Annual Grassland[1]	2,042.30
Chaparral and Scrub	
Chaparral[1]	789.74
Coastal Scrub [1]	1,728.22
Developed	
Agricultural Land	106.68
Disturbed Land	2,705.03
Urban/Developed Land	5,578.52

Sources: CDFW 2025b.

Notes:

[1] Associated with MCV alliances that contain sensitive vegetation associations.

3.1.1 Vegetation Communities

3.1.1.1 Wetlands and Waters

Fresh Water

Fresh water, which is typically an unvegetated habitat, includes year-round bodies of fresh water in the form of lakes, streams, ponds, or rivers. This includes those portions of water bodies that are usually covered by water and contain less than 10 percent vegetated cover. BIOS did not report any specific MCV alliances associated with fresh water.

Approximately 14.40 acres of fresh water occur within the Project area (Figure 6). Fresh water may fall under the regulatory jurisdiction of the USACE, USFWS, RWQCB, or CDFW.

Freshwater Emergent Wetland

Freshwater emergent wetlands are generally persistent wetlands dominated by low-growing, perennial wetland species and can be found in channels, seeps, and springs; floodplains; margins of lakes and rivers; and various basins such as pools and ponds, palustrine lakes, montane meadows, and dune swales. BIOS did not report any specific MCV alliances associated with freshwater emergent wetland.

Approximately 35.81 acres of freshwater emergent wetland occurs along documented aquuatic resources within the Project area (Figure 6). Freshwater emergent wetland has the potential to fall under the regulatory jurisdiction of the USACE, USFWS, RWQCB, or CDFW.

Non-Vegetated Channel

Non-vegetated channel consists of predominantly sandy, gravelly, or rocky channels lacking or with reduced vegetation. Variable water lines inhibit the growth of vegetation, although some weedy species of grasses may grow along the outer edges of the channel. Vegetation may exist here but is usually less than 10 percent of the total cover. BIOS did not report any specific MCV alliances associated with non-vegetated channel.

Approximately 25.01 acres of non-vegetated channel occur in the Project area. Non-vegetated channel can be found along numerous streams and drainages that occur throughout the Project area (Figure 6), and has the potential to fall under the regulatory jurisdiction of the USACE, USFWS, RWQCB, or CDFW.

Riparian Forest/Scrub

Riparian forest and scrub communities documented in the Project area are associated with the MCV *Sambucus nigra (*black elderberry*)* alliance, *Baccharis salicifolia* (mulefat) alliance, *Salix lasiolepis* (arroyo willow) alliance, *Salix gooddingii* (Goodding's willow) alliance, and *Platanus racemosa* (Western sycamore) alliance. All of these alliances include MCV vegetation associations that are considered sensitive (CDFW 2025c). *Baccharis salicifolia* alliances are shrub communities dominated or co-dominated by mulefat. They contain two canopy tiers, with heights of 2 meters and 5 meters, and sparse understories. *Salix lasiolepis* alliances are riparian shrub communities dominated or co-dominated by arroyo willow. They grow up to 10 meters in height, and canopies are open to continuous. Understories are variable. *Salix gooddingii* alliances are woodlands dominated or co-dominated by Goodding's willow. Canopy heights reach up to 30 meters, and are open to continuous. Shrub layers are sparse to continuous, and understories are variable. *Platanus racemosa* alliances are riparian woodlands dominated or co-dominated by western sycamore. Canopies are open to intermittent and reach heights up to 35 meters. The shrub layer is open to intermittent, and understories are sparse or grassy.

Approximately 604.04acres of riparian forest/scrub occurs in the Project area, primarily in the eastern portion (Figure 6). The riparian forest/scrub in the Project area may fall under the regulatory jurisdiction of the CDFW.

3.1.1.2 Upland Habitats

Cismontane Woodland

Cismontane woodland documented in the Project area is associated with the MCV *Juglans californica* (California black walnut) alliance and the *Quercus agrifolia* (coast live oak) alliance, both of which contain MCV vegetation associations that are considered sensitive (CDFW 2025c). *Juglans californica* alliances are woodlands dominated or co-dominated by California black walnut, with canopy heights up 15 meters tall, open to continuous canopies, sparse to intermittent shrub layers, and a sparse or

grassy understory. *Quercus agrifolia* alliances are upland woodlands dominated or co-dominated by coast live oak. These woodlands grow up to 30 meters tall, with open to continuous canopies, sparse to intermittent shrub layers, and sparse or grassy understories.

Approximately 886.77 acres of cismontane woodland occurs in the Project area, primarily in the northern and eastern portions (Figure 6).

Annual Grassland

Generally, annual grasslands are dominated by annual grasses and forbs. Grass species may be native or non-native, but are generally dominated by oat (*Avena* sp.), red brome (*Bromus rubens*), ripgut brome (*Bromus diandrus*), barley (*Hordeum* sp.) and mustard (*Brassica* sp.). BIOS did not report any specific MCV alliances associated with annual grassland documented in the Project area.

Approximately 2,042.30 acres of annual grassland occurs in the Project area, primarily along moderate to steeply sloped hillsides in the northern and eastern portions of the Project area (Figure 6).

Chaparral

Chaparral documented in the Project area is associated with the MCV *Quercus berberidifolia* (Scrub oak) alliance and *Heteromeles arbutifolia* (Toyon) alliance, both of which include MCV vegetation associations that are considered sensitive (CDFW 2025c). *Quercus berberidifolia* alliances are shrub communities dominated or co-dominated by scrub oak. They grow to heights of 6 meters, and have continuous canopies. The understories are sparse. *Heteromeles arbutifolia* alliances are shrub communities dominated or co-dominated by toyon, and grow to heights of up to 15 meters. The canopies are open to continuous, and understories are sparse to continuous. Approximately 789.74 acres of chaparral occurs in the Project area, primarily along steep hillsides in the northern and eastern portions of the Project area (Figure 6).

Coastal Scrub

Coastal scrub documented in the Project area is associated with the MCV *Opuntia littoralis (*Coast prickly pear) alliance, *Artemisia californica* (California sagebrush) alliance, *Malosma laurina* (laurel sumac) alliance, *Eriogonum fasciculatum (*California buckwheat) alliance, *Atriplex lentiformis* (big saltbush) alliance, *Salvia mellifera (*black sage) alliance, *Artemisia californica* - *Salvia mellifera* alliance, and *Artemisia californica* - *Eriogonum fasciculatum* alliance. All alliances, except the *Salvia mellifera* alliance, include MCV vegetation associations that are considered sensitive, (CDFW 2025c). *Opuntia littoralis* alliances are shrub communities dominated or co-dominated by coast prickly pear. Canopies are intermittent or continuous and occur in two tiers, with heights up to two meters. The understories are continuous and diverse. *Artemisia californica* alliances are shrub communities co-dominated by California sagebrush. *Artemisia californica* alliances may contain one or two tiers, reaching 2 meters to 5 meters tall.

Canopies are intermittent to continuous, and understories are variable both seasonally and annually. *Malosma laurina* alliances are shrub communities dominated or co-dominated by laurel sumac. They grow up to five meters tall, and have open to continuous canopies. Understories are sparse or grassy. *Eriogonum fasciculatum* alliances are shrub communities dominated or co-dominated by California buckwheat. Shrubs reach up to two meters, and canopies are continuous or intermittent. Understories are variable and may be grassy. *Atriplex lentiformis* alliances are shrub communities dominated by big saltbush. They consist of open to intermittent canopies reaching heights of up to 5 meters. The understories are variable. *Salvia mellifera* alliances are shrub communities dominated or co-dominated by black sage. *Salvia mellifera* alliances may contain one or two tiers, reaching up to 2 meters tall. Canopies are intermittent to continuous, and understories are variable; grasses and herbs are seasonal. *Artemisia californica* - *Salvia mellifera* alliances are shrub communities co-dominated by California sagebrush and black sage with a relatively open canopy. The understories are well-developed. *Artemisia californica* - *Eriogonum fasciculatum* alliances are shrub communities co-dominated by California sagebrush and California buckwheat. The canopy may be one or two-tiered, with heights of two to five meters, and ranging from intermittent to continuous in coverage. Understories are well-developed.

Approximately 1,728.22 acres of coastal scrub occurs in the Project area, primarily along steep hillsides in the northern and eastern portions of the Project area (Figure 6).

3.1.2 Land Cover Types

Agricultural Land

Agricultural land is not considered a vegetation community, therefore BIOS did not report any MCV alliances associated with agricultural land Agricultural land includes areas occupied by dairies and livestock feed yards or areas that have been tilled for use as croplands or groves and orchards.

Approximately 106.68 acres of agricultural land occurs primarily in the central and southern portions of the Project area (Figure 6). The agricultural land in the Project area is primarily composed of vineyards, fruit orchards, and grain crops.

Disturbed Land

Disturbed land is not considered a vegetation community, therefore BIOS did not report any MCV alliances associated with disturbed land Disturbed land consists of previously disturbed areas that either are devoid of vegetation (dirt roads/trails) or support scattered non-native plant species, such as ornamentals or ruderal exotic species, that take advantage of disturbance, such as black mustard (*Brassica nigra*), short-pod mustard (*Hirschfeldia incana*), and *Erodium* species. These species are non-native and typically found in disturbed habitats, particularly in areas that have been graded,

repeatedly cleared for fuel management purposes, and/or experienced repeated use that prevents natural revegetation.

Approximately 2,705.03 acres of disturbed land occurs in the Project area. Disturbed land primarily consists of barren hillsides located in the eastern portion of the Project area (Figure 6).

Urban/Developed Land

Urban/developed land is not considered a vegetation community, therefore BIOS did not report any MCV alliances associated with urban/developed land. (Holland 1986). Urban/developed land represents areas that have been constructed on or otherwise physically altered to an extent that native vegetation communities are not supported. This land cover type generally consists of semi-permanent structures, homes, parking lots, pavement or hardscape, and landscaped areas that require maintenance and irrigation (e.g., ornamental greenbelts). Typically, this land cover type is unvegetated or supports a variety of ornamental plants and landscaping.

Urban/developed land occupies the greatest amount of the Project area, encompassing approximately 5,578.52 acres of the Project area. The urban/developed land mainly occurs within the City itself, in the western portion of the Project area (Figure 6).

3.2 Jurisdictional Wetlands and Waters

The Project area supports wetlands and waters potentially subject to the regulatory jurisdiction of the USACE pursuant to Section 404 of the CWA, RWQCB pursuant to Section 401 of the CWA or the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and the CDFW pursuant to Section 1600 et seq. of the California Fish and Game Code (CFGC). Aquatic and riparian vegetation communities occurring in the Project area may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW.

As described in Section 1.3.3, Hydrology, numerous major and minor aquatic features occur across the two watersheds in which the Project area is located (Figure 5). This includes features that are defined by the USACE as traditional navigable waters, are tributaries, or have direct connections to the Pacific Ocean. Most of the rivers, streams, and creeks that occur in the Project area are documented aquatic resources under the jurisdiction of the USACE, RWQCB, and CDFW, pursuant to Sections 404 and 401 of the CWA and Section 1602 of the CFGC, respectively. The wetlands, waters, and riparian vegetation communities documented in the Project area and described in Section 3.1, Vegetation Communities and Land Cover Types, including fresh water, freshwater emergent wetland, non-vegetated channel, and riparian forest/scrub, may also be under federal and state jurisdiction. In addition, wetland waters and non-wetland waters, including non-vegetated stream channels, erosional features, gullies, and concrete-lined channels, that occur in the Project area may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW. However, only these agencies can make a final determination of jurisdictional boundaries.

3.3 Sensitive Plant and Wildlife Species

Sensitive species are those recognized by federal, state, or local agencies as being potentially vulnerable to impacts because of rarity, local or regional reductions in population numbers, isolation/restricted genetic flow, or other factors. Sensitive plant species include those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS and CDFW; those considered sensitive by the CDFW; or those species included in the California Rare Plant Rank (CRPR) inventory, maintained by the CNPS. Sensitive wildlife species include those listed as threatened or endangered, proposed for listing, candidates for listing by the USFWS and CDFW; those considered sensitive by the CDFW; or the CDFW Watch List (WL).

Based on the database search results, which included a 1-mile buffer in addition to the Project area for the California Natural Diversity Database, a two quadrangle search (La Habra and Yorba Linda) for the CNPS inventory and the IPaC query, ten sensitive plant species and 20 sensitive wildlife species have been documented in and have the potential to occur in the Project area (Figure 7, Historical Species with Potential to Occur). These species are listed in Table 2, Sensitive Plant Species Documented in the Project Area, and Table 3, Sensitive Wildlife Species Documented in the Project Area (Calflora 2025; CDFW 2025a; CDFW 2025b; CNPS 2025; USFWS 2025b).

3.3.1 Sensitive Plant Species

A total of ten sensitive plant species (Table 2) have been documented within a 1-mile buffer of the Project area and are discussed in more detail in the following sections.

Table 2. Sensitive Plant Species Documented in the Project Area

Scientific Name	Common Name	Federal/State/CRPR
Astragalus brauntonii	Braunton's milk-vetch	FE/None/1B.1
Berberis nevinii	Nevin's barberry	FE/CE/1B.1
Calochortus weedii var. intermedius	Intermediate mariposa-lily	None/None/1B.2
Dudleya multicaulis	Many-stemmed dudleya	None/None/1B.2
Eriastrum densifolium ssp. *sanctorum*	Santa Ana River woollystar	FE/CE/1B.1
Juglans californica	Southern California black walnut	None/None/4.2
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/None/4.3
Nasturtium gambelii	Gambel's water cress	FE/CT/1B.1
Phacelia hubbyi	Hubby's phacelia	None/None/4.2
Romneya coulteri	Coulter's matilija poppy	None/None/4.2

Sources: Calflora 2025; CDFW 2025a, 2025b; CNPS 2025; USFWS 2025b.

Notes: CE = California endangered; CRPR = California Rare Plant Rank; CT = California threatened; FE = federally endangered; CRPR: 1B = rare, threatened, or endangered in California and elsewhere; .1 = seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat); .2 = moderately threatened in California (20–80 percent occurrences threatened/moderate degree and immediacy of threat)

Braunton's Milk-vetch *(Astragalus brauntonii)*

- **Status:** Federally endangered, CRPR 1B.1

- **Distribution:** As of 2023, 60 known occurrences are present in Southern California, primarily within Los Angeles, Orange, and Ventura Counties.
- **Habitat:** Coastal scrub and valley and foothill grassland, in recent burns or disturbed areas, usually sandstone with carbonate layers at elevations between 15 and 2100 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Coastal scrub and annual grassland.
- **Occurrence in Project Area:** Documented in the eastern portion of the Project area (Figure 7).
- **Years Documented:** 2013

Nevin's Barberry-vetch *(Berberis nevinii)*

- **Status:** Federally endangered, State Endangered, CRPR 1B.1
- **Distribution:** Southern California, primarily within Los Angeles, San Bernardino, Riverside, and Ventura Counties.
- **Habitat:** Chaparral, coastal scrub, cismontane woodland, and riparian scrub at elevations between 230 and 2705 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Chaparral, coastal scrub, cismontane woodland, and riparian scrub.
- **Occurrence in Project Area:** Documented in the western portion of the Project area.
- **Years Documented:** Unknown

Intermediate Mariposa-lily (*Calochortus weedii* var*. intermedius*)

- **Status:** CRPR 1B.2
- **Distribution:** Southern California, primarily in the South Coast and Peninsular Range regions.
- **Habitat:** Coastal scrub, valley and foothill grassland with rocky, calcareous soils at elevations between 345 and 2,805 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Coastal scrub and annual grassland with calcareous soil.
- **Occurrence in Project Area:** Documented in the southeastern and northeastern portions of the Project area (Figure 7).
- **Years Documented:** 1937, 1998, 2000, 2005, 2008, 2010, 2011, 2017, 2019
-

Many-stemmed Dudleya (*Dudleya multicaulis*)

- **Status:** CRPR 1B.2
- **Distribution:** Southern California, primarily in Orange County.
- **Habitat:** Chaparral, coastal scrub, valley and foothill grassland, often in clay soils, at elevations between 50 and 2,590 feet amsl (CNPS 2025).

- **Suitable Habitat in Project Area:** Chaparral, coastal scrub, and annual grassland with clayey soils.
- **Occurrence in Project Area:** Documented in the northwestern portion of the Project area (Calflora 2025).
- **Years Documented:** 2020.

Santa Ana River Woollystar (*Eriastrum densifolium* ssp. *sanctorum*)

- **Status:** Federally endangered, California endangered, CRPR 1B.1
- **Distribution:** Santa Ana River drainage in southern California.
- **Habitat:** Chaparral, coastal scrub in gravelly or sandy soils at elevations between 300 and 2,00 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub with sandy soil.
- **Occurrence in Project Area:** Documented in the northern portion of the Project area (CNPS 2025).
- **Years Documented:** 1980

Southern California Black Walnut (*Juglans californica*)

- **Status:** CRPR 4.2
- **Distribution:** Central valley and the coast range valleys from northern to southern California.
- **Habitat:** Chaparral, cismontane woodland, coastal scrub, riparian woodland, in alluvial soils, at alevations between 165 and 2,955 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Chaparral, coastal scrub, annual grassland, cismontane woodland with alluvial soils.
- **Occurrence in Project Area:** Documented in the northern, northeastern, and eastern portions of the Project area (Calflora 2025).
- **Year Documented:** 2014, 2019, 2020, 2021, 2022.

Robinson's Pepper-grass (*Lepidium virginicum var. robinsonii*)

- **Status:** CRPR 4.3
- **Distribution:** Southwestern California, between Santa Barbara and San Diego counties.
- **Habitat:** Chaparral, coastal scrub at elevations between 5 and 2,905 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub.
- **Occurrence in Project Area:** Documented in the northern portion of the Project area (Figure 7).
- **Years Documented:** 2010

Gambel's Water Cress (*Nasturtium gambelii*)

- **Status:** Federally endangered, California threatened, CRPR 1B.1
- **Distribution:** Very few scattered occurrences in southern California.
- **Habitat:** Brackish and freshwater marshes and swamps at elevations between 15 and 1,085 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Freshwater
- **Occurrence in Project Area:** Documented in the southern portion of the Project area (CNPS 2025).
- **Years Documented:** 1980 (possibly extirpated).

Hubby's Phacelia (*Phacelia hubbyi*)

- **Status:** CRPR 4.2
- **Distribution:** Southern coastal California, primarily in Santa Barbara, Ventura, Los Angeles, and Orange Counties.
  Habitat: Chaparral, coastal scrub, valley and foothill grassland in gravelly, rocky, and talus soils at elevations between 0 and 3,280 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Chaparral, coastal scrub, and annual grassland with rocky and talus soils.
- **Occurrence in Project Area:** Documented in the eastern portion of the Project area (Calflora 2025).
- **Years Documented:** 2023, 2025.

Coulter's Matilija Poppy (*Romneya coulteri*)

- **Status:** CRPR 4.2
- **Distribution:** Coastal and inland southern and central California, [primarily in Orange and San Bernardino Counties.
- **Habitat:** Chaparral, coastal scrub, often in burned areas, at elevations between 65 and 3,935 feet amsl (CNPS 2025).
- **Suitable Habitat in Project Area:** Chaparral and coastal scrub.
- **Occurrence in Project Area:** Documented in the eastern portion of the Project area (Calflora 2025).
- **Years Documented:** 2020.

3.3.2 Sensitive Wildlife Species

A total of 20 sensitive wildlife species (two invertebrate, five reptiles, 11 birds, and two mammals) have been documented in the Project area (Table 3), and are discussed in more detail in the following sections.

Table 3. Sensitive Wildlife Species Documented in the Project Area

Species		Status
Scientific Name	**Common Name**	**Federal/State**
Invertebrates		
Bombus crotchii	Crotch's bumble bee	None/CCE
Danaus plexippus	Monarch butterfly	FPT/None
Reptiles		
Actinemys pallida	Southwestern pond turtle	FPT/SSC
Crotalus ruber	Red-diamond rattlesnake	None/SSC
Phrynosoma blainvillii	Blainville's (coast) horned lizard	None/SSC
Salvadora hexalepis virgultea	Coast patch-nosed snake	None/SSC
Spea hammondii	Western spadefoot toad	FPT/SSC
Birds		
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	None/WL
Ammodramus savannarum	Grasshopper sparrow	None/SSC
Aquila chrysaetos	Golden Eagle	BGEPA/CFP, WL
Athene cunicularia	Western burrowing owl	None/CCE, SSC
Campylorhynchus brunneicapillus sandiegensis	Coastal cactus wren	BCC/SSC
Empidonax traillii extimus	Southwestern willow flycatcher	FE/SE
Eremophila alpestris actia	California horned lark	None/WL
Icteria virens	Yellow-breasted chat	None/SSC
Polioptila californica californica	Coastal California gnatcatcher	FT/SSC
Setophaga petechia	Yellow warbler	None/SSC
Vireo bellii pusillus	Least Bell's vireo	FE/CE
Mammals		
Eumops perotis californicus	Western mastiff bat	None/SSC
Nyctinomops femorosaccus	Pocketed free-tailed bat	None/SSC

Sources: CDFW 2025a, 2025b; USFWS 2025b.

Notes: BGEPA = federal bald and golden eagle protection act; CCE = California candidate endangered; CE = California endangered; CFP= California fully protected; FE = federally endangered; FT= federally threatened; FPT = federally proposed threatened; BCC = federal bird of conservation concern; SSC = CDFW species of special concern; WL = CDFW watch list.

Invertebrates

Crotch's Bumble Bee (*Bombus crotchii*)

- **Status:** California candidate endangered species
- **Distribution:** Southwestern California.
- **Habitat:** Occurs in open grasslands, shrublands, chaparral, desert margins, creosote scrub, and semi-urban areas. Forages on species with open flowers and short corollas due to their short tongue, most commonly Fabaceae, Apocynaceae, Asteraceae,

Lamiaceae, Hydrophyllacae, Asclepiadaceae, and Boraginaceae species. While little is known about hibernacula of this species, it is likely that it overwinters in soft, disturbed soil and nests underground (Xerces Society 2018).

- **Suitable Habitat in Project Area:** Cismontane woodland, coastal scrub, chaparral, agricultural land, and urban/developed land with underground cavities, flowering nectar and pollen plants, and open areas with loose soils for overwintering.
- **Occurrence in Project Area:** Documented in the southeastern portion of the Project area (Figure 7).
- **Years Documented:** 1968, 2024.

Monarch Butterfly (*Danaus plexippus*)

- **Status:** Federally proposed threatened, CDFW SSC
- **Distribution:** North America.
- **Habitat:** Occurs in a variety of habitats where patches of milkweed (*Asclepias* sp.), the monarch caterpillar host plant, are present. Overwinters in groves of eucalyptus, cypress, and pine along the California coast and high-elevation forests in Mexico.
- **Suitable Habitat in Project Area:** Cismontane woodland, coastal scrub, chaparral, annual grassland, agricultural land, and urban/developed land with flowering nectar plants, and eucalyptus, cypress, or pine groves for overwintering.
- **Occurrence in Project Area:** Unknown.
- **Years Documented:** Unknown.

Reptiles

Southwestern Pond Turtle (*Actinemys pallida*)

- **Status:** Federally proposed threatened, CDFW SSC
- **Distribution:** Restricted to the central Coast Range south from the middle of Monterey Bay to the species' southern range boundary in Baja California.
- **Habitat:** Occurs in slow-moving permanent or intermittent streams, ponds, lakes, permanent and ephemeral wetlands, and reservoirs with emergent basking sites. This species spends most of its life in water, but also requires terrestrial habitats for nesting and during winter (USFWS 2025c; USFWS 2025d).
- **Suitable Habitat in Project Area:** Fresh water streams and ponds with surrounding uplands for nesting.
- **Occurrence in Project Area:** Documented in the central and eastern portions of the Project area (Figure 7).
- **Year Documented:** 1996, 2010, 2011, 2013.

Red-diamond Rattlesnake (*Crotalus ruber)*

- **Status:** CDFW SSC
- **Distribution:** Southern California's coastal and inland foothills south through most of the Baja California Peninsula.
- **Habitat:** Occurs in arid desert in rocky areas, chaparral, woodland, and dense vegetation (Thompson et al 2016).
- **Suitable Habitat in Project Area:** Chaparral, cismontane woodland, and in disturbed areas where dense vegetation is present.
- **Occurrence in Project Area:** Documented in the eastern and southeastern portions of the Project area (Figure 7).
- **Year Documented:** 1995.

Blainville's (Coast) Horned Lizard (*Phrynosoma blainvillii*)

- **Status:** CDFW SSC
- **Distribution:** Sierra Nevada foothills from Butte County to Kern County and throughout the Central and Southern California coast.
- **Habitat:** Occurs in sandy soils in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats (CDFW 2000).
- **Suitable Habitat in Project Area:** Riparian forest/scrub and annual grassland with sandy soils.
- **Occurrence in Project Area:** Documented in the northeastern portion of the Project area (Figure 7).
- **Year Documented:** 1985, 2011.

Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*)

- **Status:** CDFW SSC
- **Distribution:** Coastal and inland southern California into northwestern Baja California, Mexico.
- **Habitat:** Occurs in coastal sage scrub, chaparral, open woodlands, desert-edge habitats, and rocky hillsides and canyons containing loose, sandy soils (Thompson et al 2016).
- **Suitable Habitat in Project Area:** Costal scrub, chaparral, riparian forest/scrub, cismontane woodland, and annual grassland with sandy soils.
- **Occurrence in Project Area:** Documented in the southeastern portion of the Project area (Figure 7).
- **Year Documented:** 1993

Western Spadefoot Toad (*Phrynosoma blainvillii*)

- **Status:** California candidate threatened species, CDFW SSC
- **Distribution:** California

- **Habitat:** Occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Some populations persist for a few years in orchard or vineyard habitats (Zeiner et al 1988-1990).
- **Suitable Habitat in Project Area:** Cismontane woodland and annual grassland with water sources for breeding.
- **Occurrence in Project Area:** Unknown.
- **Year Documented:** Unknown.

Birds

Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)

- **Status:** CDFW WL
- **Distribution:** Southern California and northwestern Baja California, Mexico.
- **Habitat:** Occurs in coastal sage scrub and sparse mixed chaparral on rocky hillsides and in canyons, and is also found in open sage scrub/grassy areas of successional growth. Tends to be more common in areas that have burned in the past 15 years (Unitt 2004).
- **Suitable Habitat in Project Area:** Coastal scrub, chaparral, and annual grassland.
- **Occurrence in Project Area:** Documented in the central portion of the Project area (Figure 7).
- **Year Documented:** 2005, 2008.

Grasshopper Sparrow (*Ammodramus savannarum*)

- **Status:** CDFW SSC
- **Distribution:** United States, Mexico, and Canada, and central America. Only known in California in coastal and central regions.
- **Habitat:** Restricted to grassland habitats, typically dominated by native bunchgrasses. Nests are placed hidden within clumps of dense grass, but this species will occupy open areas within prairies, hayfields, and open pastures while foraging for insects (Shuford et al. 2008).
- **Suitable Habitat in Project Area:** Annual grassland.
- **Occurrence in Project Area:** Documented in the northern and southeastern portions of the Project area (Figure 7).
- **Year Documented:** 2001 and 2011.

Golden Eagle (*Aquila chrysaetos*)

- **Status:** Federal Bald and Golden Eagle Protection Act, California fully protected, CDFW WL

- **Distribution:** Ranges from Alaska and northern Canada south through the western United States and Mexico. Also found across northern Europe, Asia, northern Africa, and parts of the Middle East and Himalayas.
- **Habitat:** Occurs in mountains up to 12,000 feet amsl, canyon lands, rocky terrain, and riverside cliffs and bluffs. Usually nest on cliffs but may also build nests in trees, on the ground, or in human-made structures and towers (USFWS 2025c).
- **Suitable Habitat in Project Area:** Steep canyons, crags or bluffs within coastal scrub, chaparral, cismontane woodland, and riparian forest/scrub.
- **Occurrence in Project Area:** Documented in the central and southeastern portions of the Project area (Figure 7).
- **Year Documented:** 2007.

Western Burrowing Owl (*Athene cunicularia*)

- **Status:** USFWS Bird of Conservation Concern, CDFW SSC
- **Distribution:** Throughout the United States, Mexico, Central America, South America, and northeast Caribbean.
- **Habitat:** Occurs in open, dry annual or perennial grasslands, deserts, and scrublands, as well as agricultural and ruderal landscapes, characterized by low-growing vegetation with available burrows or burrow-like structures such as culverts. Often associated with high densities of burrowing small mammals (Shuford et al. 2008).
- **Suitable Habitat in Project Area:** Annual grassland and coastal scrub with low-growing vegetation and available small mammal burrows or burrow-like structures.
- **Occurrence in Project Area:** Documented in the north-central portion of the Project area (Figure 7).
- **Year Documented:** 2016.

Coastal Cactus Wren (*Campylorhynchus brunneicapillus sandiegensis*)

- **Status:** USFWS BCC, CDFW SSC
- **Distribution:** Northwestern Baja California north through the coastal lowlands in San Diego County and into southern Orange County.
- **Habitat:** Occurs in coastal cholla and prickly pear (*Opuntia littoralis* and *Opuntia oricola*) patches in coastal sage scrub and maritime succulent scrub (Shuford et al. 2008).
- **Suitable Habitat in Project Area:** Coastal scrub with dense patches of cholla or prickly pear.
- **Occurrence in Project Area:** Documented in the central and south-central portions of the Project area (Figure 7).
- **Year Documented:** 1995, 2005.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

- **Status:** Federally endangered, State endangered
- **Distribution:** Arizona, California, Colorado, New Mexico, Texas, Utah
- **Habitat:** Occurs in dense riparian vegetation along streams.
- **Suitable Habitat in Project Area:** Non-vegetated channel, riparian forest/scrub
- **Occurrence in Project Area:** unknown.
- **Year Documented:** unknown.

California Horned Lark (*Eremophila alpestris actia*)

- **Status:** CDFW WL
- **Distribution:** California.
- **Habitat:** Occurs primarily in grassland and beach habitats but can also be found in disturbed lands, agricultural lands, and alpine fell fields in the Sierra Nevada (CDFW 2025d).
- **Suitable Habitat in Project Area:** Annual grassland and agricultural land.
- **Occurrence in Project Area:** Documented in the north-central portion of the Project area (Figure 7).
- **Year Documented:** 2008.

Yellow-breasted Chat (*Icteria virens*)

- **Status:** CDFW SSC
- **Distribution:** United States, southern Canada, Mexico, and central America.
- **Habitat:** Occurs in riparian thickets of willow and other brushy tangles near waterways.
- **Suitable Habitat in Project Area:** Riparian forest/scrub with dense willow coverage.
- **Occurrence in Project Area:** Documented in the northern, central, southern, and southeastern portions of the Project area (Figure 7).
- **Year Documented:** 2001, 2011, 2013, 2016.

Coastal California Gnatcatcher (*Polioptila californica californica*)

- **Status:** Federally threatened, CDFW SSC
- **Distribution:** Southern California to Baja California, Mexico.
- **Habitat:** Occurs almost exclusively in coastal sage scrub vegetation but can also be found in chaparral and riparian habitats (USFWS 2010).
- **Suitable Habitat in Project Area:** Coastal scrub and chaparral.
- **Occurrence in Project Area:** Documented in the northwestern, central, southeastern, and southwestern portions of the Project area (Figure 7).
- **Year Documented:** Over 400 occurrences documented from 1985 through 2020.

Yellow Warbler (*Setophaga petechia*)

- **Status:** CDFW SSC
- **Distribution:** United States, Canada, Mexico, and central America
- **Habitat:** Occurs primarily in riparian woodlands, and less often in montane chaparral and mixed coniferous forests with thick brush.
- **Suitable Habitat in Project Area:** Riparian forest/scrub.
- **Occurrence in Project Area:** Documented in the central and northern portions of the Project area (Figure 7).
- **Year Documented:** 2003, 2011, 2016.

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

- **Status:** Federally endangered, California endangered
- **Distribution:** California and northern Baja California, Mexico during breeding season and winters in southern Baja California, Mexico.
- **Habitat:** Occurs in a variety of habitats, but most often associated with riparian habitat vegetated with willow species in Southern California below 2,000 feet in elevation. Requires dense understory shrub cover for nest concealment, with an overstory dominated by willows.
- **Suitable Habitat in Project Area:** Riparian forest/scrub with dense understory and willow overstory.
- **Occurrence in Project Area:** Documented in the central, northern, eastern and southeastern portions of the Project area (Figure 7).
- **Year Documented:** 51 occurrences documented from 1996 to 2018.

Mammals

Western Mastiff Bat (*Eumops perotis californicus*)

- **Status:** CDFW SSC
- **Distribution:** San Joaquin Valley and Coastal Ranges from Monterey County through southern California, from the coast eastward to the Colorado Desert.
- **Habitat:** Occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban habitats. Roosts in rock crevices, cliff faces, high buildings, trees, and tunnels (Zeiner et al 1988-1990).
- **Suitable Habitat in Project Area:** Coastal scrub, chaparral, cismontane woodland, annual grassland, and urban/developed land with appropriate tunnels, bridges, and buildings for roosting.
- **Occurrence in Project Area:** Documented in the south-central portion of the Project area (Figure 7).

- **Year Documented:** 2007.

Pocketed Free-tailed Bat (*Nyctinomops femorosaccus*)

- **Status:** CDFW SSC
- **Distribution:** Southwestern United States, Mexico, and Central America
- **Habitat:** Occurs in pinyon-juniper woodlands, desert scrub, desert succulent scrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis. Roosts in rock crevices, caverns, or buildings (Zeiner et al 1988-1990).
- **Suitable Habitat in Project Area:** rocky cliffs, cervices, caverns, and urban/developed land with bridges, buildings, tunnels appropriate for roosting.
- **Occurrence in Project Area:** Documented in the central portion of the Project area (Figure 7).
- **Year Documented:** 1989.

3.3.3 Critical Habitat

Critical habitat is defined as the specific areas within the geographic range occupied by the species at the time of listing that contain the physical or biological features that are essential to the conservation of these endangered or threatened species and that may need special management or protection (USFWS 2025d).

Coastal California gnatcatcher was the only species with designated critical habitat mapped in the Project area and its vicinity (Figure 8, Critical Habitat) (USFWS 2025d). Critical habitat for coastal California Gnatcatcher occurs throughout the northern, central, and southeastern portions of the Project area in areas of open space.

3.3.4 Nesting Birds

The Project area contains suitable nesting habitat for many bird and raptor species protected under the CFGC and the Migratory Bird Treaty Act (MBTA). The majority of habitat for nesting birds in the Project area occurs in the native and ornamental trees, shrubs, and buildings that occur throughout the Project area. The structures in the developed land also have the potential to support nesting by certain species that use structures with eaves, ledges, crevices, cracks, and other "cavities," nest in or on utility structures, or nest on rooftops, such as black phoebe (*Sayornis nigricans*), gulls (*Larus* sp.), and Bewick's wren (*Thryomanes bewickii*). Suitable habitat for tree- and shrub-nesting species, including sensitive coastal California gnatcatcher, southwestern willow flycatcher, least Bell's vireo, and yellow warbler, is available in the coastal scrub, chaparral, cismontane woodland, riparian forest/scrub communities in the Project area. The trees throughout the Project area could also support nesting by more common birds, including Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), and orioles (*Icterus* sp.), which often nest in ornamental palm and eucalyptus trees. Grassland- and ground-nesting species, such as the

sensitive grasshopper sparrow, California horned lark, and western burrowing owl, all documented in the Project area could nest in the annual grassland and open agricultural land throughout the Project area. The availability of large amounts of high-quality nesting habitat with access to nearby food and water sources make it very likely that birds and raptors use the Project area for nesting.

3.3.5 Sensitive Roosting Bats

The Project area contains suitable foraging and roosting habitat for sensitive bat species, including western Mastiff bat, which was documented south of the Project area (Table 2; Figure 7). The structures in the developed land of the Project area provide suitable roosting habitat for structure- and cavity-dwelling bats such as big brown bat (*Eptesicus fuscus*). Additionally, the numerous native trees in the cismontane woodland and riparian forest/scrub communities and the ornamental trees throughout the developed land of the Project area could provide suitable roosting habitat for tree-roosting bats, such as the hoary bat (*Lasiurus cinereus*) and western red bat (*Lasiurus blossevillii*), a CDFW species of special concern. There are also numerous non-vegetated channels, wetlands, and freshwater lakes and ponds present in the Project area which provide suitable foraging habitat for bats roosting in the area that forage over sources of open water, such as the western mastiff bat (*Eumops perotis*). The availability of suitable habitat indicates bats are likely roosting and foraging in the Project area.

3.4 Wildlife Corridors and Habitat Linkages

Wildlife corridors provide routes for local movement and also regional linkages and corridors, often following linear topographic, vegetation, or water features. These corridors can be continuous habitats features, or "stepping stone" areas, providing critical rest and foraging areas for birds traveling along migratory routes, for example. Local routes of movement provide constant connections to resources that include sources of water, home/cover sites, and foraging areas. Regional linkages and movement corridors provide larger patches of open space to allow relatively free movement of wildlife species along multiple paths between important resources. These areas allow for not only long-term genetic flow between subpopulations but also critical pathways of seasonal/migratory movements. Larger predatory mammals often use regional corridors for hunting and reproduction needs. Potential wildlife corridors can include streams, riparian areas, and culverts under roadways. Habitat characteristics considered included topography, habitat quality, and adjacent land uses.

The Project area provides opportunities for wildlife movement and dispersal and provides connections to surrounding and nearby open space areas. In addition, the Project area contains suitable nesting, foraging, and nursery sites for many wildlife species.

The major aquatic resources, including rivers and streams, as well as riparian corridors around many of these features, provide important wildlife movement corridors throughout the Project

area. These areas function to facilitate amphibian, fish, reptile, bird, and mammal movement in the region.

The Puente-Chino Hills area, located within and surrounding the northern and eastern portions of the Project area, provides connectivity between the Santa Ana mountains to the south and the San Gabriel mountains to the north, and function as a vital corridor for wildlife movement through the open space and native vegetation communities that occur in these areas.

The Project area is also in the Pacific Flyway, the major migratory bird corridor of the western United States. The Project area contains open space, native vegetation, and aquatic resources, and its position in the Pacific Flyway migratory corridor makes it very likely to provide habitat for migratory birds traveling between nesting and wintering areas.

According to the California Essential Habitat Connectivity Project, which maps relatively natural habitat blocks that support native biodiversity, several areas spanning from northeast to southwest in the western portion of the Project area serve as natural landscape blocks (CDFW 2025e). Additionally, small natural areas are scattered throughout the Project area (Figure 9, Wildlife Corridors/NCCPs).

The Project area is likely to be used as a movement corridor for both sensitive and common wildlife species because of the native vegetation communities, undeveloped open space, inland mountainous regions, and numerous fresh water aquatic resources within and adjacent to the Project area. The open space within the Project area has the potential to provide important habitat connectivity both locally and regionally.

Section 4 Regulatory Framework

This section summarizes federal, state, regional, and local regulations, plans, policies, and programs that provide protection and management of sensitive biological resources that are applicable to the Project. The federal government administers non-marine plant- and wildlife-related issues through the USFWS, while waters of the U.S. issues are administered by the USACE. California law relating to wetland, water-related, and wildlife issues is administered by the CDFW. Under the California Environmental Quality Act (CEQA), impacts associated with a project or program are assessed with regard to significance criteria determined by the CEQA lead agency (in this case, the City) pursuant to the CEQA Guidelines. Biological resources-related laws and regulations that apply include the federal Endangered Species Act, MBTA, Clean Water Act (CWA), CEQA, California Endangered Species Act, and CFGC.

4.1 Federal

Bald and Golden Eagle Protection Act (16 USC 668–668d). This act prohibits the possession, selling, or hunting of bald or golden eagles. This includes living eagles and their feathers, nests, eggs, or body parts.

CWA Section 404 (33 CFR 328.3[a]). These provisions regulate the discharge of dredged or fill material in waters of the U.S, including wetlands. Activities that discharge dredge or fill material into waters of the U.S. can be authorized by the USACE.

On August 29, 2023, the U.S. Environmental Protection Agency and the USACE issued a final rule to amend the final "Revised Definition of Waters of the U.S." The 2023 final rule became effective on September 8, 2023. Under the 2023 final rule:

(a) Waters of the U.S. are defined as:
1. Waters which are:
    i. Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
    ii. The territorial seas; or
    iii. Interstate waters;
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under (a)(5) of this section;
3. Tributaries of waters identified in (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;

4. Wetlands adjacent to the following waters:
    i. Waters identified in (a)(1) of this section; or
    ii. Relatively permanent, standing or continuously flowing bodies of water identified in (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
    iii. Intrastate lakes and ponds not identified in (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in (a)(1) or (a)(3) of this section.

Federal Endangered Species Act, Sections 7 and 9 (16 USC 1531 et seq.; 50 CFR Part 402). This act prohibits the "take" (i.e., harm, harass, or kill individuals or destroy associated habitat) of species federally listed as threatened or endangered. Take incidental to otherwise lawful activities can be authorized by the USFWS through a permit under the federal Endangered Species Act, Sections 4(d), 7, or 10(a).

MBTA (16 USC 703–712; 50 CFR 10). The MBTA prohibits the direct or indirect take of migratory birds and their active nests unless permitted.

4.2 State

Birds of Prey Protection Provision (California Fish and Game Code, Section 3503.5). This provision prohibits the taking of birds of prey (Order Falconiformes and Strigiformes), including their nests and eggs.

California Endangered Species Act (California Fish and Game Code, Section 2050 et seq.). This act prohibits any activities that would jeopardize or take a species designated as threatened or endangered by the state.

Streambed Alteration Agreement (California Fish and Game Code, Section 1600). The CFGC requires any person who proposes a project that will substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake, or their tributaries, or use materials from a streambed to submit a notification for a Streambed Alteration Agreement to the CDFW.

California Fish and Game Code, Section 1602. Section 1602 regulates water resources in the State of California. Activities that divert or obstruct the natural flow of or change or use material from the bed, channel, or bank of any river, stream, or lake may be authorized by the CDFW. CDFW jurisdiction includes intermittent and perennial watercourses and extends to the top of the bank of a stream or lake if unvegetated or to the limit of the adjacent riparian vegetation, located contiguous to the watercourse, if the stream or lake is vegetated.

California Fish and Game Code, Section 3503. Section 3503 prohibits the take, possession, or needless destruction of the nests or eggs of any birds except as otherwise provided by the code or any regulation made pursuant thereto.

CEQA, as amended (California Public Resources Code, Section 21000 et seq.). The goal of CEQA is to assist California public agencies in identifying potentially significant negative environmental impacts caused by their actions and avoiding or mitigating those impacts when feasible.

California Fully Protected Wildlife Species Provision (California Fish and Game Code, Sections 3511, 4700, 5050, and 5515). These provisions prohibit the taking of fully protected birds, mammals, amphibians, and fish.

California Native Plant Protection Act of 1977 (California Fish and Game Code, Sections 1900–1913). These provisions preserve, protect, and enhance endangered or rare native plants of the state.

Regional Water Quality Control Board (RWQCB). The RWQCB regulates impacts to water quality under Section 401 of the CWA. A project must comply with Section 401 of the CWA before the USACE can issue a Section 404 Permit. The RWQCB will issue a Section 401 Water Quality Certification or Waiver of Certification, depending on the extent of impacts to waters of the United States. The RWQCB also regulates impact to waters of the state (usually limited to "isolated" waters or swales that may not fall under USACE jurisdiction) under the Porter-Cologne Act.

Natural Community Conservation Planning Act (NCCP), as amended (California Fish and Game Code, Sections 2800–2835). The primary objective of the Natural Community Conservation Planning Act (NCCP) program is to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listing by focusing on the long-term suitability of wildlife and plant communities and including key interests in the process.

Porter-Cologne Water Quality Control Act. Regulated by the RWQCB for impacts to waters of the state. Although water quality issues related to impacts to waterways are normally addressed in a Section 401 Water Quality Certification, should a water of the State of California be determined by the USACE not to have CWA jurisdiction, the Porter-Cologne Act would be addressed under a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending on the level of impact and the properties of the waterway.

4.3 Local

4.3.1 City of Brea General Plan

The City's comprehensive General Plan was adopted in 2003 (2003 Brea General Plan). The 2003 Brea General Plan identifies the community's vision for its collective future and establishes the fundamental framework to guide future decision-making about development, resource

management, public safety, public services, and general community well-being. During creation of the General Plan, the community worked together to craft this vision and define it through text and illustrations. The General Plan reflects the planning desires and values of Brea residents, the business community, community educators, and elected and appointed officials.

The 2003 Brea General Plan describes how Breans will work to retain the natural and aesthetic qualities that make their City unique, but at the same time, respond to the dynamics of regional growth and meeting changing community needs. The 2003 Brea General Plan serves as a policy guide, balancing these interrelated factors to Brea's community vision. The goals and policies contained in the City's General Plan supports the overarching vision statement, which is: "IMAGINE BREA: Brea will be a community that provides great places to live, work, learn, and play; Places that respect the community's natural and cultural resources; Provide open space and public spaces that appeal to all Breans; Encourage economic vitality, and enhance the overall quality of life for all residents."

In support of this vision statement, the community defined four overarching goals that embody the community's values and will guide all decisions made pursuant to this General Plan (City of Brea 2003).

> Goal 1: Create an inclusive community that strives to meet the needs of residents of all ages, income levels, occupations, family types, and lifestyles.
>
> Goal 2: Plan for the sustainable stewardship of natural resources.
>
> Goal 3: Provide a range of mobility options that reduce dependence on the automobile.
>
> Goal 4: Maintain a sustainable economic base to provide a solid fiscal foundation and diverse employment opportunities, and to ensure the provision of quality community facilities and services.

In support of the City's commitment to enhance the living environment for all residents by providing, facilitating, and supporting parks, recreation facilities and programs, and open space of high quality in a cost-effective manner, the following community resource (CR) goals were put in place:

> Goal CR-1: Provide a variety of parks and recreation facilities that meet the diverse needs and interests of the community.
>
> Goal CR-2: Protect and preserve existing parks and recreation facilities.
>
> Goal CR-3: Maximize use of open space areas capable of supporting park-type activities.

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.

Goal CR-5: Provide a flexible and balanced open space and conservation plan.

Goal CR-6: Provide an extensive trail system that links all areas of Brea.

Goal CR-7: Encourage an urban and walkway trail system within the urban areas of the City.

Goal CR-8: Preserve and maintain wildlife and animal movement corridors.

Goal CR-9: Preserve and maintain open space, natural habitat, and vegetation communities that support wildlife species and animals.

Goal CR-10: Pursue aggressively the preservation and protection of scenic resources.

Goal CR-11: Conserve and protect water resources through water conservation standards, sustainable development practices, and water quality standards.

Goal CR-12: Protect the beneficial uses of ground and surface waters.

Goal CR-13: Improve air quality.

Goal CR-14: Preserve historically significant landmarks and/or sites, individual structures, objects, and neighborhoods, and encourage appropriate rehabilitation.

Goal CR-15: Make all Breans aware of the importance of historic preservation.

4.3.2 Orange County Transportation Authority Natural Community Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) Planning Agreement

The Orange County Transportation Authority (OCTA) NCCP/HCP accommodates the implementation of the OCTA's 13 proposed freeway projects proposed under Measure M (M2), designed to reduce congestion, increase capacity, and improve traffic flow of Orange County's important transportation infrastructure. It would also accommodate management activities conducted on the OCTA acquired lands (or preserves) within Orange County. The M2 NCCP/HCP includes the lands along existing freeways in which M2 freeway improvement projects will be constructed and provides a framework to protect and enhance natural resources in Orange County while streamlining the environmental permitting process for Covered Projects and Activities. Covered projects and activities include 13 freeway improvement projects and ongoing management, restoration, and monitoring activities in preserves associated with the M2 NCCP/HCP. The M2 NCCP/HCP fulfills

the requirements of issuance of take permits from the California Department of Fish and Game (CDFG) and the United States Fish and Wildlife Service (USFWS).

Section 5 Thresholds of Significance

Appendix G of the CEQA Guidelines (CEQA Guidelines, Section 15000 et seq.) defines "significant effect on the environment" as a "substantial, or potentially substantial adverse change in the environment." Appendix G of the CEQA Guidelines further indicates that there may be a significant effect on biological resources if the project would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
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.
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.
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
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.

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Section 6 Impacts

Impacts to biological resources from implementation of the Project are categorized quantitatively as direct and indirect impacts.

Direct impacts to biological resources occur when significant alterations or destruction occurs during the course of, or because of, Project implementation. Examples of such impacts include removing, disturbing, or grading vegetation; dredging or grading a stream bank; filling wetlands with any materials; erecting any structures, including in a stream; and severing or physically restricting wildlife corridors and the distribution of individual species or resources. Other direct impacts may include loss of foraging or nesting habitat and loss of individual species as a result of habitat clearing.

Indirect impacts may include elevated levels of noise or lighting, change in surface water hydrology within a floodplain, and increased erosion or sedimentation. These types of indirect impacts can affect vegetation communities or their potential use by sensitive species. They can also cause the disruption of normal wildlife functions or activities, impacting individual species.

Within the direct and indirect quantitative impacts categories, impacts are also qualified temporally as permanent and temporary impacts.

Permanent impacts may result in irreversible damage to biological resources, including habitat or removal of species from a particular area.

Temporary impacts are interim changes in the local environment due to construction and would not extend beyond project-associated construction, including revegetation of temporarily disturbed areas adjacent to native habitats.

An analysis of the exact acreage of direct impacts that would occur on biological resources, including sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages, in the Project area from Project implementation is not provided at the programmatic level. This is because such an analysis would be speculative in nature since focused surveys were not conducted, and future site-specific project designs are not known at this time.

6.1 Threshold 1: Sensitive Plant and Wildlife Species

6.1.1 Guidelines for Determination of Significance

Significant impacts to sensitive plant and wildlife species could result if the Project has a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the CDFW and USFWS.

6.1.2 Impacts Analysis

6.1.2.1 Sensitive Plant Species

Direct Impacts

A total of ten sensitive plant species have been documented by historical literature and databased within one mile of the Project area (refer to Table 2, Sensitive Plant Species Documented in the Project Area, and Figure 7). No biological surveys or focused species surveys were conducted as a part of this Project. The Project area consists of eight habitats and three land cover types (refer to Table 1), including fresh water, freshwater emergent wetland, non-vegetated channel, cismontane woodland, riparian forest/scrub, annual grassland, chaparral, coastal scrub, agricultural land, disturbed land, and urban/developed land. The potential for these habitats and land cover types to provide suitable habitat for sensitive plant species is summarized below.

Developed (Urban/developed Land, Disturbed land, and Agricultural land). Impacts on urban/developed land and agricultural land, which comprises approximately 5,685 acres, have a low potential to impact sensitive plant species because these areas provide little to no suitable habitat value for the sensitive plant species documented in the Project area. However, impacts on disturbed land have the potential to impact sensitive plant species. Impacts to these disturbed habitat could result in potentially significant impacts without mitigation.

Wetlands and Waters (Fresh Water, Freshwater Emergent Wetland, and Non-Vegetated Channel). The aquatic habitats present in the Project area, including fresh water, freshwater emergent wetland, and non-vegetated channel, have the potential to support sensitive plant species, including Gambel's water cress. Impacts to these vegetation communities could result in potentially significant impacts without mitigation.

Woodland and Forest (Cismontane Woodland and Riparian Forest/Scrub). The cismontane woodland and riparian forest/scrub communities throughout the Project area have the potential to support sensitive plants documented in the Project area, including southern California black walnut and Nevin's barberry. Impacts to these vegetation communities could result in potentially significant impacts without mitigation.

Upland Vegetation Communities (Annual Grassland, Chaparral, and Coastal Scrub). The upland vegetation communities of annual grassland, chaparral, and coastal scrub present in the Project area provide suitable habitat for many of the sensitive plant species documented as occurring in the Project area, such as Braunton's milk-vetch, intermediate mariposa-lily, many-stemmed dudleya, Santa Ana River woollystar, Robinson's pepper-grass, Hubby's Phacelia, Nevin's barberry Coulter's and Matilija Poppy. Impacts to these vegetation communities could result in potentially significant impacts without mitigation.

Impacts to the vegetation communities listed above as well as disturbed habitat are assumed to be significant without mitigation because they could result in impacts to sensitive plant species. Prior to impacts to undeveloped areas that could support sensitive plant species occurring in the Project area, a site specific biological survey shall be required to be conducted to determine the presence and potential for occurrence of sensitive plant species and to quantify potential impacts on these resources (Mitigation Measure BIO-1). While suitable habitats for the historically documented sensitive plant species may be present in the Project area, many of these species have specific microhabitat requirements, including soils and elevation range restrictions, that may reduce the potential for these species to occur on a particular site. Therefore, site specific biological surveys are needed to analyze potential impacts.

If the results of the biological survey determine that sensitive plant species are not present and do not have a high potential to occur, direct impacts to sensitive plant species would be less than significant, and no further mitigation is required.

Alternatively, if the results of the biological survey determine that sensitive plant species are present or have a high potential to occur due to available suitable habitat, direct impacts to sensitive plant species would occur and further mitigation would be required (Mitigation Measures BIO-2 through BIO-4).

Indirect Impacts

Temporary indirect impacts to sensitive plant species could result during Project implementation, and may include dust, which could disrupt plant vitality in the short term, or construction-related soil erosion and runoff. Permanent edge effects, which are changes that occur at the boundary between two different communities or habitats (i.e., native habitat and urban/developed land), could result during operation of the Project. These edge effects may include intrusions by humans and therefore possible trampling of individual plants, invasion by exotic plant and wildlife species, exposure to urban pollutants (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrologic changes (e.g., surface and groundwater level and quality).

Like the discussion under Sensitive Plant Species, Direct Impacts, if the results of the biological surveys determine that sensitive plant species are not present and do not have a high potential to occur, indirect impacts to sensitive plant species would be less than significant, and no further mitigation would be required.

Alternatively, if the results of the biological survey determine that sensitive plant species are present or have a high potential to occur due to available suitable habitat, indirect impacts to sensitive plant species could occur.

However, the Project would be required to be in compliance with state and local regulations controlling erosion and stormwater runoff, including the National Pollutant Discharge Elimination

System (NPDES) Construction General Permit provisions, which would trigger preparation and compliance with an approved Stormwater Pollution Prevention Plan that would consider the full range of erosion control best management practices (BMPs), including any additional site-specific and seasonal conditions to minimize any water quality and erosion impacts that could result during construction. The City of Brea participates in the NPDES permit program via a partnership consisting of Orange County, all cities within Orange County, and the County Flood Control District. Therefore, through compliance with these regulations, indirect impacts to sensitive plant species would be less than significant, and no mitigation is required.

6.1.2.2 Sensitive Wildlife Species

Direct Impacts

A total of 20 sensitive wildlife species have been documented by historical literature and databased in the Project area (refer to Table 3, Sensitive Wildlife Species Documented in the Project and Figure 7). No biological surveys or focused species surveys were conducted as a part of this Project.

Implementation of the Project on urban/developed land has a low potential to impact sensitive wildlife species because it provides little to no suitable habitat value for the sensitive wildlife species documented in the Project area. However, the ornamental trees and shrubs and structures present in the urban/developed land could provide potential overwintering habitat for monarch butterfly and suitable foraging and roosting habitat for sensitive bats documented in the Project area, including western Mastiff bat. Direct impacts to the trees, shrubs, and structures in the urban/developed land of the Project area could result in direct impacts in the form of foraging, nesting, and roosting habitat loss.

The aquatic habitats present in the Project area including wetlands and streams, have the potential to provide suitable habitat for sensitive reptiles like southwestern pond turtle, and foraging, nesting, for sensitive bird species such as southwestern willow flycatcher, least Bell's vireo, and yellow-breasted chat.

The woodland and forest communities of cismontane woodland and riparian forest/scrub throughout the Project area support sensitive reptiles, birds, and mammals documented in the Project area, including but not limited to Blainville's (coast) horned lizard and red-diamond rattlesnake. If sandy and/or gravelly soils are present, these areas may have the potential to support western spadefoot.

The upland vegetation communities of annual grassland, chaparral, and coastal scrub present in the Project area provide suitable habitat for sensitive invertebrates, reptiles, birds, and mammals documented in the Project area. These sensitive wildlife species include monarch butterfly, grasshopper sparrow, coastal cactus wren, western burrowing owl, and California horned lark,

among others. If sandy and/or gravelly soils are present, these areas may have the potential to support western spadefoot.

Although the disturbed and agricultural land throughout the Project area is unlikely to support most of the historically documented sensitive wildlife species, species like western burrowing owl have adapted to frequently use highly cultivated and disturbed areas such as agricultural lands for burrowing (if suitable burrows and soil conditions are available) and as movement corridors.

Impacts to the vegetation communities listed above are assumed to be significant without mitigation because they could result in impacts to sensitive wildlife species. Prior to impacts to sensitive vegetation communities that could support sensitive wildlife species, a biological survey shall be required to be conducted to determine the presence and potential for occurrence of sensitive wildlife species and to quantify potential impacts on these resources (Mitigation Measure BIO-1). .

If the results of the biological survey determine that sensitive wildlife species are not present and do not have high potential to occur, direct impacts to sensitive wildlife species would be less than significant, and no further mitigation is required.

Alternatively, if the results of the biological survey determine that sensitive wildlife species are present or have a high potential due to available suitable habitat, direct impacts to sensitive wildlife species would be considered potentially significant without further mitigation (Mitigation Measures BIO-3, BIO-4, BIO-5, BIO-6).

Nesting Birds

The Project area provides potentially suitable nesting habitat for birds and raptors protected under the CFGC and MBTA. Focused nest surveys were not conducted due to the programmatic nature of the Project. If construction activities or other disruptive Project activities begin during the general bird and raptor nesting season (January 15 through September 15), the Project could result in potentially significant impacts without mitigation. Prior to impacts to potential nesting bird habitat in the Project area, a nesting bird survey would be required to implement regulations protecting sensitive nesting birds, including the CFGC and MBTA (Mitigation Measure BIO-7).

Sensitive Roosting Bats

As previously discussed, suitable roosting habitat for sensitive bat species, including western Mastiff bat, occurs in the structures and trees throughout the Project area. Although no focused nighttime mist-netting or acoustic surveys were conducted, the potential availability of suitable roosting with nearby foraging habitat suggests that bats may be roosting in the Project area. Therefore, if sensitive roosting bats are present, potential impacts would be considered potentially

significant without mitigation. Prior to impacts to potential roosting bat habitat in the Project area, a roosting bat survey would be required (Mitigation Measure BIO-6).

Critical Habitat

Critical habitat for coastal California gnatcatcher occurs in the Project area (Figure 8). Potential impacts to this sensitive species in its designated critical habitat could occur during implementation of the Project on these opportunity sites and would be considered potentially significant without mitigation. Prior to impacts to coastal California gnatcatcher critical habitat in the Project area, a biological resources survey and habitat assessment would be required to implement regulations protecting critical habitat (Mitigation Measure BIO-1).

Like the discussion under Sensitive Wildlife Species, Direct Impacts, if the results of the biological survey determine that suitable habitat for coastal California gnatcatcher is not present, direct impacts to this sensitive species in its designated critical habitat would be less than significant, and no mitigation is required.

Alternatively, if the results of the biological survey determine that suitable coastal California gnatcatcher habitat is present, direct impacts to designated critical habitat for coastal California gnatcatcher would be considered potentially significant without mitigation. Implementation of Mitigation Measures BIO-3 through BIO-7 would be required to reduce impacts to critical habitat to a less than significant level.

Indirect Impacts

Temporary construction-related and long-term operational indirect impacts to wildlife generally include lighting, increased human activity, hydrologic quality (increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), noise, vibration, and trash and garbage, which can attract both introduced terrestrial and native terrestrial and avian predators (such as American crows, common ravens [*Corvus corax*], coyotes [*Canis latrans*], domestic dogs [*Canis familiaris*], raccoons [*Procyon lotor*], and striped skunks [*Mephitis mephitis*]). These indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species historically documented in the Project area, identified in Section 3.3.2, Sensitive Wildlife Species, and discussed under Direct Impacts in Section 6.1.2.2, Sensitive Wildlife Species.

Like the discussion under Sensitive Wildlife Species, Direct Impacts, if the results of the biological survey determine that sensitive wildlife species are not present and do not have a high potential to occur, indirect impacts to sensitive wildlife species would be less than significant, and no mitigation is required.

Alternatively, if the results of the biological survey determine that sensitive wildlife species are present or have a high potential to occur due to available suitable habitat, indirect impacts to sensitive wildlife species could occur.

As previously discussed under Indirect Impacts in Section 6.1.2.1, Sensitive Plant Species, indirect impacts to sensitive wildlife species from hydrologic changes, including erosion, stormwater runoff, and pollution discharges, would be reduced through project compliance with NPDES Construction General Permit provisions.

However, indirect impacts to sensitive wildlife species from lighting, increased human activity, and potential predation by mesocarnivores attracted by trash and garbage could result. Therefore, indirect impacts to sensitive wildlife during Project construction activities would be considered potentially significant without mitigation.

6.1.3 Mitigation Measures

Sensitive Plant Species

Implementation of Mitigation Measure BIO-1 and BIO-2 would reduce potential direct and indirect impacts to sensitive plant species through conducting sensitive plant species focused surveys prior to construction of the Project. Direct impacts to vegetation communities potentially occupied by sensitive plant species would be conserved or restored through the implementation of Mitigation Measure BIO-3 and Mitigation Measure BIO-4.

The operation of future projects proposed as a result of changes to the General Plan under this Project could potentially result in indirect impacts to biological resources, such as edge effects. These potential impacts are not addressed in this report because such impacts would be project specific and variable and to do so at this point would be speculative. Rather these potential indirect impacts resulting from operation of such projects would be addressed on a project-by project basis through the environmental review required under Mitigation Measure BIO-1 and compliance with existing local policies, and federal and state environmental regulations.

Sensitive Plant

MM BIO-1 **Pre-project/Activity Biological Resources Survey/Habitat Assessment.** For project sites within vegetation communities and land covers other than "Urban/Developed," as shown on Figure 6, Vegetation Communities and Land Cover Types, the following requirements shall apply.

Prior to the issuance of any clearing, grading, or construction permits for individual development projects that are not exempt from California Environmental Quality Act (CEQA), and in conjunction with any required CEQA review, the future project applicant shall submit one or more documents to the City of Planning Division for

review and approval, demonstrating that the project site does not contain native vegetation, sensitive plants, or undisturbed soils. Examples of acceptable documentation include, but are not limited to, the following:

- Aerial photographs (historic and current) showing grading, building footprints, paving, and landscaped areas over time to support ornamental status, existing landscape plans.
- Photographic documentation consisting of georeferenced or dated photographs.
- Landscaping plans or as-built drawings demonstrating that vegetation was intentionally planted as part of site development.
- Field survey results prepared by a qualified biologist confirming that existing plant species are ornamental and non-native.

Within the future site-specific project areas exhibiting native vegetation,, a site-specific biological resources survey shall be conducted during the project design phase.

The biological resources survey and habitat assessment shall be conducted by a qualified biologist and shall include but not be limited to the following:

- An analysis of available literature and biological databases, such as the California Natural Diversity Database, to determine sensitive biological resources that have been reported historically from the Proposed Project vicinity.
- A review of current land use and land ownership within the Project vicinity.
- An assessment and mapping of vegetation communities present within the Project vicinity. If vegetation community mapping has not been conducted on the site in the previous 3 years, updated vegetation mapping shall be conducted by a qualified biologist as part of the Project planning and environmental review process. Vegetation communities shall be mapped according to the Manual of California Vegetation at the alliance level, and a crosswalk table with Holland vegetation communities shall be provided.
- A general assessment of the potential for aquatic resources, including wetlands and riparian habitats, to occur on site.
- An evaluation of potential local and regional wildlife movement corridors.
- A focused habitat assessment to determine if the Project area supports vegetation communities that may provide habitat for plant or wildlife species, to be conducted by a qualified biologist, to determine the potential for sensitive plant or wildlife species to occur in or adjacent to the Project area.
- If the Project area supports sensitive vegetation communities, the project proponent shall implement the following weed control methods to minimize the

establishment and spread of non-native and invasive weed species in the project site during construction activities:

- Seeds and plant materials used for revegetation shall be certified weed free.
- Straw materials, such as those used for erosion control, shall be certified weed free.

The results of the biological survey shall be presented in a biological technical report. The survey report shall map and describe the location and extent of observed sensitive resources, including sensitive vegetation communities, plant, and wildlife species within the areas of potential direct and indirect effects for each project area, direct and indirect impacts associated with construction and operation of a project, and the need for further survey, monitoring, or mitigation, including measures pursuant to mitigation measures MM BIO-2, MM BIO-3, MM BIO-4, MM BIO-5, MM BIO-6, and MM BIO-7 of this Program Environmental Impact Report.

MM BIO-2: **Focused Sensitive Plant Species Surveys.** Prior to subsequent project-level approval and prior to any construction or grading activities, focused surveys for future site-specific development shall be conducted, as applicable, in suitable habitat, to determine presence/absence of sensitive plant species in the Project area. Focused sensitive plant surveys shall be conducted during the species' specific blooming periods to determine presence/absence. If sensitive plant species are mapped within any proposed construction, access, or staging areas, these species shall be quantified and flagged, and these areas shall be modified to avoid direct impacts to mapped sensitive plant species. If significant impacts to these species are unavoidable, the impact on these species shall be reduced to a less than significant level through implementation of one or a combination of the following actions, in accordance with a Conceptual Restoration Plan or acquisition of mitigation credits, reviewed and approved by the City of Brea:

- Impacted plants shall be salvaged and relocated to suitable habitat in an on-site restoration area, if possible. If relocation to a restoration area is not practical, the plants shall be relocated off-site to an appropriate location determined by a qualified biologist.
- Seeds from impacted plants shall be collected for use at a local off-site location, as applicable.
- Off-site habitat that supports the species impacted shall be enhanced or supplemented with seed collected on site.
- Comparable habitat at an approved off-site location shall be determined by a qualified biologist and preserved for relocation, enhancement, or transplant of the impacted sensitive plants.

Mitigation that involves relocation, enhancement, or transplant of sensitive plants shall include all the following:

- Conceptual planting plan prepared by a qualified biologist including grading, planting specifications, and, if appropriate, temporary irrigation.
- Planting specifications and fencing and signage to discourage unauthorized access of the planting site.
- Monitoring program prepared by a qualified biologist with clearly stated goals and objectives and well-defined performance standards that result in no net loss of sensitive plant resources. Final success criteria shall be determined based on quality, quantity, and species of plant impacted and in consultation with California Department of Fish and Wildlife and U.S. Fish and Wildlife Service depending on the status of the species. The monitoring program will include measures for adaptive management detailing remedial actions if success criteria are not met in the monitoring time frame. Remedial actions may include, but are not limited to, supplemental water, replanting, and herbivore deterrents/protections.

MM BIO-3 **Sensitive Vegetation Communities Impacts Mitigation.** Prior to subsequent project-level approval and prior to any construction or grading activities, a biological survey shall be conducted to ground-truth and/or update vegetation communities. Any direct impacts to sensitive vegetation communities require mitigation to comply with California Department of Fish and Wildlife authorizations, as well as the ratios defined in any State or federal permit(s) issued for the Proposed Project.

Potential direct impacts to sensitive vegetation communities resulting from Project implementation shall be mitigated prior to any vegetation clearing or ground-disturbing activities within the site-specific areas through one of the following three options:

a. Vegetation communities and land cover types will be verified in the field during the required biological survey and will be mapped for impact analysis;
b. Compensatory mitigation for sensitive habitats shall be satisfied through the acquisition of mitigation bank credits via a resource agency-approved mitigation site within the site's specific watershed or by acquisition of other off-site mitigation credits to be identified and selected in coordination with CDFW. Prior to implementation of Project construction impacts (e.g., vegetation clearing or ground-disturbing activities) that would require compensatory mitigation, documentation demonstrating the availability of mitigation credits (i.e., credit ledger) at the approved mitigation site must be submitted to the City of Brea for confirmation; or
c. If credits are not available at a resource agency-approved mitigation site within the site's specific watershed or through other off-site mitigation

credits, implementation of habitat creation, restoration, enhancement, or preservation shall occur through a Habitat Mitigation and Monitoring Plan developed by a qualified biologist. Under this option, a Habitat Mitigation and Monitoring Plan shall be provided and prepared to achieve no net loss of the resource, be timed in relation to Project impacts, and comply with Federal and State mitigation requirements.

When proposed mitigation involves habitat enhancement, restoration or creation, the Habitat Mitigation and Monitoring Plan shall include all of the following information:

- Conceptual planting plan including planting zones, grading, and irrigation.
- Seed mix/planting palette.
- Planting specifications.
- Monitoring program prepared by a qualified biologist including success criteria that ensure no net loss of sensitive vegetation communities. Final success criteria shall be determined based on quality, quantity, and type of habitat impacted and in consultation with CDFW. The monitoring program shall include measures for adaptive management plan detailing remedial actions if success criteria are not met in the monitoring time frame. Remedial actions may include, but are not limited to, supplemental water, replanting, and herbivore deterrents/protections.

For mitigation that involves habitat acquisition, the Habitat Mitigation and Monitoring Plan shall include all the following:

- Location of proposed acquisition.
- Description of the biological resources to be acquired, including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact.
- Documentation that the mitigation area would be adequately preserved and maintained in perpetuity.

The identification of mitigation site credits shall be provided to the City of Brea and shall include the following:

- Location of approved mitigation site.
- Description of the mitigation credits to be acquired, including substantial evidence that the acquired habitat mitigates for the specific maintenance impact.
- Documentation of the credits that are associated with a mitigation bank, which has been approved by the appropriate resource agencies.
- Documentation in the form of a current mitigation credit ledger.

MM BIO-4: **Habitat Restoration for Temporary Impacts.** Temporary impact areas shall be restored to pre-construction topographic contours and conditions, including the revegetation of native plant communities, where appropriate, following disturbance and prior to Project completion. Habitat restoration and erosion control treatments shall be installed within these short-term impact areas. Habitat revegetation shall feature native species that are typical of the area, and associated erosion control best management practices shall include silt fence and microplastic- and weed-free straw fiber rolls, where appropriate. The revegetation areas shall be monitored and maintained by a qualified biologist or restoration specialist for 25 months to ensure adequate establishment and sustainability of the plantings/seedings.

Where a Project activity involves potential disturbance of non-native invasive plant species (as identified by the California Invasive Plant Council), these plants shall be entirely removed immediately, where feasible, and the removal shall be monitored by the qualified monitoring biologist to ensure that dispersal of propagules (e.g., seeds and stems) are avoided or minimized. Where removal of plant roots is not feasible (e.g., where erosive flows are predicted), aboveground plant material shall be fully removed and monitored by the qualified monitoring biologist. Where aboveground plant material cannot be removed (e.g., due to limited access), herbicides shall be applied by a licensed pest control advisor, using chemicals permitted as safe within aquatic environments.

Sensitive Wildlife Species

In the event that sensitive wildlife species are identified as present or with a high potential to occur in suitable habitat or other sensitive wildlife species are identified within the potential impact area, impacts would be considered potentially significant without mitigation.

Direct impacts to vegetation communities potentially occupied or used by sensitive wildlife species would be conserved or restored through the implementation of Mitigation Measure BIO-3 and Mitigation Measure BIO-4, listed previously under Sensitive Plant Species Mitigation Measures.

Implementation of Mitigation Measure BIO-5 would reduce potential direct and indirect impacts to sensitive wildlife species, including sensitive roosting bats, through monitoring by a qualified biologist prior to and during construction of the Project. Mitigation Measure BIO-6 and Mitigation Measure BIO-7 would reduce potential direct impacts to sensitive wildlife species, including sensitive birds and raptors, roosting bats, and designated critical habitat for coastal California gnatcatcher, through conducting sensitive bird and wildlife species focused surveys prior to construction.

MM BIO-5: **Qualified Monitoring Biologist.** Prior to subsequent Project-level approval and prior to the start of construction activities, a qualified monitoring biologist shall be

retained to implement required monitoring. The qualified monitoring biologist shall be responsible for the following monitoring and reporting tasks:

a. **Biological Construction Mitigation/Monitoring Exhibit.** Prior to the start of construction within the future site-specific project areas that have potential to contain sensitive biological resources, the qualified monitoring biologist shall submit a Biological Construction Mitigation/Monitoring Exhibit, which includes limits of work, proposed monitoring schedule, bird, focused sensitive species, or other wildlife surveys/survey schedules (including general bird nesting and U.S. Fish and Wildlife Service protocol), timing of surveys, bird construction avoidance areas/noise buffers/barriers, other impact avoidance areas, and any subsequent requirements determined by the qualified monitoring biologist. The Biological Construction Mitigation/Monitoring Exhibit shall include the construction site plan, written and graphic depiction of the Proposed Project's biological mitigation/monitoring program, and a schedule for construction activities. Where the potential for impacts to biological resources is limited (e.g., construction within a footprint that consists entirely of previously developed or disturbed lands), the Biological Construction Mitigation/Monitoring Exhibit may be limited to a pre- and post-maintenance verification inspection by a qualified biologist. For highly sensitive resource areas with documented sensitive biological and aquatic resources present, full-time biological monitors may be required, as determined by a qualified biologist. The Biological Construction Mitigation/Monitoring Exhibit shall be approved by the City of Brea prior to the start of construction.
b. **Resource Marking/Protection.** Prior to the start of construction activities within the future site-specific Project area, the qualified monitoring biologist shall supervise the placement of orange construction fencing or similar visible marker, staking, or flagging along the limits of the construction area adjacent to sensitive biological habitats, as shown on the Biological Construction Mitigation/Monitoring Exhibit to ensure crews remain within the approved construction limits. These demarcations shall not be required for areas with existing barriers, such as chain-link fencing, along the limits or facilities that are within or adjacent to developed and non-sensitive habitat areas. This task shall include flagging plant specimens and delineating buffers to protect sensitive biological resources (e.g., habitats, sensitive plant and wildlife species, including nesting birds) prior to construction.
c. **Cover Trenches.** The qualified monitoring biologist shall oversee the construction site so that cover and escape routes for wildlife from excavated areas shall be provided daily. All trenches, holes, and excavations during construction shall be covered at night as directed by the monitoring biologist with plywood, metal

plates, or other means, and if plastic sheeting is used, the edges must be covered with soils such that small wildlife cannot access the excavated hole. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and before sealing the exposed area) by the qualified monitoring biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route. The qualified monitoring biologist shall verify that the contractor has covered all steep-walled trenches or excavations prior to the end of construction daily. If wildlife species are encountered within any trenches or excavated areas, the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape (e.g., a ramp or sloped surface at no greater than a 30-degree angle) and allow the species to disperse. In addition, the qualified monitoring biologist shall provide training to construction personnel to increase awareness of the possible presence of wildlife beneath vehicles and equipment and to use best judgment to avoid killing or injuring wildlife (refer to Mitigation Measure BIO-5e).

d. **Structure and Tree Clearance.** Prior to the issuance of any permit to allow for the removal or demolition of trees and existing structures within the survey area (particularly any ornamental trees and existing buildings in the developed land areas), the qualified monitoring biologist shall conduct clearance surveys to flush out any wildlife species nesting, roosting, or otherwise occupying the trees or structures. If wildlife species are encountered within any of the trees or structures (outside the general bird nesting season), the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape and allow the species to disperse. If tree-roosting bats are suspected, slow removal by gently pushing the tree over with heavy equipment is required.

e. **Pre-Construction Meeting/Education.** Prior to the start of any construction activity where the site plan for the construction area indicates that significant impacts to biological resources may occur, as determined by a qualified biologist, a pre-construction meeting shall be held on site with the following in attendance: City of Brea representative (project planner and building inspector), the construction contractor (if applicable), and the qualified monitoring biologist. At this meeting, the qualified monitoring biologist shall identify and discuss the construction protocols that apply to the proposed activities and the sensitive nature of the adjacent habitat with appropriate Project personnel.

   At the pre-construction meeting, the qualified monitoring biologist shall submit to the City of Brea representatives and construction contractor a copy

of the Biological Construction Mitigation/Monitoring Exhibit that identifies areas to be protected, fenced, and monitored. This data shall include all buffer limits, if applicable.

Prior to the start of construction activities, the qualified monitoring biologist shall meet with the construction contractor and crew and conduct an on-site educational session regarding the need to avoid impacts outside the approved construction footprint and to protect sensitive plants and wildlife that may occur at the specific facility. This may include but not be limited to explanations of the bird and wetland buffers, the flag system for removal of invasive species or retention of sensitive plants, and clarification of acceptable access routes/methods and staging areas.

f. **Biological Monitoring and Reporting.** The qualified monitoring biologist with stop work authority shall inspect/monitor the Project construction area in accordance with the approved Biological Construction Mitigation/Monitoring Exhibit. This may be limited to pre- and post-maintenance inspections, weekly visits, or full-time monitoring, as determined by the qualified monitoring biologist and the City of Brea.

   The qualified monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the City of Brea Project manager each month. However, if weekly reports are submitted as part of a separate agency permit requirement, these reports may be forwarded to the City of Brea in place of Consultant Site Visit Record submittals.

   If no deviations from the construction site plan occur during maintenance, no additional documentation is required. However, if deviations from the site plan do occur, such as unanticipated impacts to sensitive vegetation communities or unanticipated discharge of pollutants, a final monitoring report shall be prepared within 3 months following the completion of mitigation monitoring detailing maintenance and monitoring that occurred, and any remedial or compensatory measures taken.

BIO-6: **Focused Sensitive Wildlife Species Surveys.** Focused surveys for future site-specific development shall be conducted, as applicable, in suitable habitat, to determine presence/absence of sensitive wildlife species within the proposed survey area. If sensitive wildlife species or their habitat are present or potentially present based on biological surveys, the following measures shall be implemented.

a. **Crotch's bumble bee.** Habitat assessment surveys for California Endangered Species Act (CESA) candidate bumble bee species, with a focus on Crotch's bumble bee, followed the California Department of Fish and Wildlife (CDFW)

methodology from the Survey Considerations for CESA Candidate Bumble Bee Species dated June 6, 2023 (CDFW Survey Considerations) (CDFW 2023). If no Crotch's bumble bees are found during the focused surveys, but the habitat assessment identified suitable nesting, foraging, or overwintering habitat in the Project area, recommendations outlined in the CDFW Survey Considerations will be followed, including recommendations that a biological monitor be on site during vegetation or ground-disturbing activities that take place during any of the Queen and Gyne Flight Period and Colony Active Period. If Crotch's bumble bees are observed, Project proponents may propose site-specific measures to avoid take, or consult with CDFW to obtain an incidental take permit if take of CESA-protected bumble bees may occur during Project activities.

b. **Western spadefoot and Monarch butterfly.** If western spadefoot or monarch butterfly become listed prior to implementation of future site-specific development projects, focused surveys and consultation with the U.S. Fish and Wildlife Service (USFWS) would be necessary.

c. **Western burrowing owl.** If suitable habitat for western burrowing owl is present (annual grassland and agricultural land), a qualified biologist shall conduct focused surveys of the site and a 500-foot buffer, as access allows. If no burrowing owls are identified, no further measures are necessary. If burrowing owls are detected, active burrows shall be avoided using buffers outlined in the Staff Report on Burrowing Owl Mitigation, dated March 7, 2012, issued by CDFW. If avoidance is not possible, the qualified biologist shall consult with CDFW. No direct disturbance to burrowing owls or their occupied habitat shall occur without appropriate authorization from CDFW.

d. **Least Bell's vireo.** If suitable habitat for least Bell's vireo is present and clearing, grubbing, grading, or other construction activities may occur between March 15 and September 15, the breeding season of the least Bell's vireo, a qualified biologist shall conduct focused surveys for the presence of the least Bell's vireo of the site and areas of potentially suitable habitat within 300 feet or that would be subject to construction noise levels exceeding 60 A-weighted decibels or to the ambient noise level if it already exceeds 60 A-weighted decibel hourly average. If present, measures to minimize noise impacts (such as temporary noise walls/berms) may be required. Noise levels from construction activities during the avian breeding season should not exceed 60 decibels (dBA Leq; or the ambient noise level if they already exceed 60 dBA Leq) at the edge of the occupied habitat. If complete avoidance is not feasible, the qualified biologist shall consult with USFWS. No direct harm to the species shall be allowed without appropriate authorization from USFWS.

e. **Southwestern willow flycatcher.** If suitable habitat for southwestern willow flycatcher is present and clearing, grubbing, grading, or other construction activities may occur between April 15 through September 15, the breeding season of the southwestern willow flycatcher, a qualified biologist shall conduct focused surveys for the presence of the southwestern willow flycatcher of the site and areas of potentially suitable habitat within 500 feet. If the species is determined to be present, consultation per Endangered Species Act with USFWS would be necessary and no activities would occur until authorized by USFWS. No direct harm to the species shall be allowed without appropriate authorization from USFWS.

f. **Sensitive Bat Species.** If suitable roosting habitat (e.g., riparian habitat, snags, wooden buildings, bridges, etc.) for sensitive bat species is present, a qualified biologist shall conduct subsequent focused surveys no less than 14 days prior to removal or disturbance of vegetation or buildings. The survey shall consist of visual and/or acoustic methods as deemed appropriate by the qualified biologist. If no bats are detected, no further measures are necessary. If bat species are detected during surveys, a site-specific plan shall be developed by the qualified biologist. The plan may include, as determined by the qualified biologist, delaying removal of roost habitat until after the maternity roosting period and exclusion of bats from roosting habitat prior to removal of habitat. The qualified biologist shall consult with CDFW prior to implementing any exclusion activities.

g. **Other Sensitive Species.** Prior to any demolition work, construction or grading activities within the future site-specific project areas, pre-construction surveys for other sensitive wildlife species, such as reptiles, may be required to determine presence/absence of sensitive wildlife species within the proposed survey area.

BIO-7: **Focused Nesting Bird Surveys.** Project activities that may directly (e.g., vegetation removal, clearing and grubbing, building demolition) or indirectly affect (noise, light, or ground vibration) nesting raptors and other protected bird species shall be timed to avoid the nesting season (January 15 through September 15). If Project activities occur within the nesting season, the qualified monitoring biologist shall conduct focused surveys for birds in suitable habitat to determine presence/absence. Surveys shall occur within seven (7) days prior to any construction or grading activities within the future site-specific project areas. Focused sensitive bird surveys shall be conducted during the species' specific nesting seasons to determine presence/absence within the development footprint plus a buffer, if recommended by the qualified monitoring biologist (refer to mitigation measure MM BIO-5). The survey report shall map and

describe the location and extent of observed sensitive bird species that would be impacted within the areas of potential effect for each Project area. If no nesting birds are documented within the individual activity area, construction shall be allowed to proceed. If nesting birds cannot be completely avoided, a no-disturbance buffer shall be established around the active nest, the size of which will be determined by the qualified monitoring biologist based on species of bird and specific construction activities to take place. The size of the buffer can be reduced in consultation with California Department of Fish and Wildlife. Any work within the buffer shall be avoided until the nest is inactive, as determined by the qualified monitoring biologist.

6.1.4 Significance After Mitigation

Implementation of Mitigation Measures BIO-1 through BIO-7 would mitigate direct and indirect impacts to sensitive plant and wildlife species to below a level of significance.

6.2 Threshold 2: Riparian Habitat or Other Sensitive Natural Community

6.2.1 Guidelines for Determination of Significance

A significant impact would result if the Project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the CDFW or USFWS.

6.2.2 Impact Analysis

Direct Impacts

A total of eight sensitive vegetation communities and three land cover types occur in the Project area, including fresh water, freshwater emergent wetland, non-vegetated channel, cismontane woodland, riparian forest/scrub, annual grassland, chaparral, coastal scrub, agricultural land, disturbed land, and urban/developed land. Construction activities in areas that contain sensitive vegetation communities could result in potential impacts to these sensitive vegetation communities.

Prior to impacts undeveloped areas occurring in the Project area, a biological survey shall be required to be conducted to determine the presence of sensitive vegetation communities and to quantify potential impacts on these resources (Mitigation Measure BIO-1).

If the results of the biological survey determine that sensitive vegetation communities are not present, direct impacts to sensitive vegetation communities would be less than significant, and no mitigation is required.

Alternatively, if the results of the biological survey determine that sensitive vegetation communities do occur, direct impacts to sensitive vegetation communities would occur and further mitigation would be required (Mitigation Measures BIO-3 through BIO-5.

Impacts to the non-sensitive land cover types, agricultural land, disturbed land, and urban/developed land would not be considered significant or require habitat-based mitigation.

Indirect Impacts

Most of the indirect impacts to sensitive plant species described in Section 6.1, Threshold 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts to sensitive vegetation communities. Like the discussion under Indirect Impacts in Section 6.1.2.1, if the results of the biological survey required by the City determine that sensitive vegetation communities do not occur, indirect impacts to sensitive vegetation communities would be less than significant, and no mitigation is required.

Alternatively, if the results of the biological survey determine that sensitive vegetation communities are present, indirect impacts to sensitive vegetation communities could occur.

As previously discussed under Indirect Impacts in Section 6.1.2.1, indirect impacts to sensitive vegetation communities from hydrologic changes, including erosion, stormwater runoff, and pollution discharges would be reduced through project compliance with NPDES Construction General Permit provisions (including preparation and implementation of a Stormwater Pollution Prevention Plan and BMPs). Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts to sensitive vegetation communities would be less than significant, and no mitigation is required.

6.2.3 Mitigation Measures

In the event that sensitive vegetation communities are identified, development of the Project area could result in potentially significant direct impacts to sensitive vegetation communities, including fresh water, freshwater emergent wetland, non-vegetated channel, cismontane woodland, annual grassland, chaparral, and coastal scrub. Implementation of Mitigation Measures BIO-3 through BIO-5 (described under Sensitive Plant and Wildlife Species Direct Impacts Mitigation) would reduce direct impacts to sensitive vegetation communities through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, creating new vegetation communities and restoring impacted ones.

6.2.4 Significance After Mitigation

Implementation of Mitigation Measures BIO-3 through BIO-5 would reduce potential direct impacts to sensitive vegetation communities to below a level of significance.

6.3 Threshold 3: Jurisdictional Aquatic Resources

6.3.1 Guidelines for Determination of Significance

A significant impact would result if the Project would have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means of disturbance.

6.3.2 Impact Analysis

Direct Impacts

Aquatic vegetation communities, including fresh water, freshwater emergent wetland, and non-vegetated channel, occur in the Project area and may fall under the regulatory jurisdiction of the USACE, RWQCB, or CDFW.

Impacts to jurisdictional aquatic resources are assumed to be significant without mitigation. If potentially jurisdictional aquatic resources are identified during the pre-project/activity biological resources survey conducted pursuant to Mitigation Measures BIO-1, a qualified biologist shall conduct a formal aquatic resources delineation (Mitigation Measure BIO-8).

If the results of the aquatics resources delineation determine that jurisdictional aquatic resources are not present, direct impacts to jurisdictional aquatic resources would be less than significant, and no further mitigation is required.

Alternatively, if the results of the aquatics resources delineation determine that jurisdictional aquatic resources occur in the site-specific project area, direct impacts to jurisdictional aquatic resources would be potentially significant without further mitigation (Mitigation Measure BIO-9).

Indirect Impacts

Most of the indirect impacts to sensitive plant species and sensitive vegetation communities described in Sections 6.1 and 6.2 also result in potentially significant indirect impacts to jurisdictional aquatic resources. Like the discussion in these sections, if the results of the biological survey determine that impacts to jurisdictional aquatic resources will not occur, indirect impacts to jurisdictional aquatic resources would be less than significant, and no further mitigation is required.

Alternatively, if the results of the biological survey determine that jurisdictional aquatic resources are present, indirect impacts to jurisdictional aquatic resources could occur.

As previously discussed under Indirect Impacts in Section 6.1.2.1, indirect impacts to jurisdictional aquatic resources from hydrologic changes, including erosion, stormwater runoff, and pollution discharges, would be reduced through project compliance with NPDES Construction General

Permit provisions (including preparation and implementation of a Stormwater Pollution Prevention Plan and BMPs). Therefore, through compliance with state and local regulations, ordinances, and plans, indirect impacts to jurisdictional aquatic resources would be less than significant, and no mitigation is required.

6.3.3 Mitigation Measures

If jurisdictional aquatic resources are identified, development of the Project area could result in potentially significant direct impacts to jurisdictional aquatic resources. Implementation of Mitigation Measures BIO-3 through BIO-5 (described under Sensitive Plant and Wildlife Species Direct Impacts Mitigation) would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas.

Prior to construction of the Project and implementation of Mitigation Measures BIO-3 through BIO-5, a formal aquatic resources delineation and resource agency (USACE, CDFW, and RWQCB) approval of the mitigation strategy to compensate for impacts to jurisdictional aquatic resources through the permitting process shall be required. Implementation of Mitigation Measure BIO-8 and Mitigation Measure BIO-9 would further reduce direct impacts to jurisdictional aquatic resources through conducting an aquatic resources delineation and obtaining resource agency permits.

MM BIO-8 Aquatic Resources Delineation. If potentially jurisdictional aquatic resources are identified during pre-project/activity surveys pursuant to mitigation measure MM BIO-1, a qualified biologist shall conduct a formal aquatic resources delineation following the methods outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and applicable Regional Supplement to the U.S. Army Corps of Engineers Wetland Delineation Manual to map the extent of wetlands and non-wetland waters, determine jurisdiction, and assess potential impacts. The results of the delineation shall be presented in an aquatic resources delineation report. The aquatic resources delineation report shall be used in consultation with the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife for necessary authorization or permit, as described in mitigation measure MM BIO-9.

MM BIO-9 Potentially Jurisdictional Aquatic Resources Permitting. Temporary and permanent impacts to the wetland and non-wetland waters potentially under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, shall be authorized by the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, as applicable. Approved temporary and permanent impacts to the potentially federal and State jurisdictional aquatic resources in the Project area require

compensatory mitigation through proposed on- or off-site habitat restoration, creation, or enhancement to the satisfaction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife to achieve a no-net loss of federal and State jurisdictional wetland and non-wetland waters.

6.3.4 Significance After Mitigation

Implementation of Mitigation Measures BIO-3 through BIO-5, Mitigation Measure BIO-8, and Mitigation Measure BIO-9 would reduce potential direct impacts to jurisdictional aquatic resources to below a level of significance.

6.4 Threshold 4: Wildlife Corridors and Habitat Linkages

6.4.1 Guidelines for Determination of Significance

A significant impact would occur if the Project would interfere substantially with the movement of any native resident or migratory fish or wildlife species, with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

6.4.2 Impact Analysis

Direct Impacts

As discussed in Section 3.4, Wildlife Corridors and Habitat Linkages, the Project area is likely to be used as a wildlife movement corridor because it provides suitable nesting, foraging, nursery, and dispersal areas for both sensitive and common wildlife species due to the presence of native vegetation communities and its connection and proximity to Puente-Chino Hills area, the Pacific Coast, as well the Santa Ana mountains to the south and the San Gabriel mountains to the north. There are numerous aquatic resources in and surrounding the Project area, which function as large-scale wildlife movement corridors for resident and migratory birds, large mammals, and aquatic species both locally and regionally. The cismontane woodland and riparian forest/scrub communities in the Project area in particular, are high-quality, contiguous sections of these habitats that support movement and linkages to other habitats along the Pacific Coast and through the mountains to the east for both local and migratory species. The residential and commercial development throughout much of the Project area has the potential to limit wildlife movement through the Project area.

Impacts to the wildlife corridors and habitat linkages are assumed to be significant without mitigation. Prior to impacts to potential wildlife corridors and habitat linkages, a biological survey shall be required to be conducted to determine the presence and potential for occurrence of these resources (Mitigation Measure BIO-1). Thus, prior to individual project construction in areas that contain sensitive vegetation communities or those that could support wildlife corridors and habitat

connectivity (such as agricultural land), a biological survey would be conducted to determine if the area is used as a wildlife corridor or linkage to other sensitive habitats.

If the results of the biological survey determine that wildlife corridors or habitat linkages are not present, direct impacts would be less than significant, and no further mitigation is required.

Alternatively, if the results of the biological survey determine that wildlife corridors and habitat linkages are present, direct impacts would be considered potentially significant without further mitigation (Mitigation Measures BIO-3 through BIO-6.

Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 6.1.2.2 for indirect impacts to sensitive wildlife species. Like the discussion under Sensitive Wildlife Species, Direct Impacts, if the results of the biological survey determine that wildlife corridors and habitat linkages are not present, indirect impacts to wildlife corridors and habitat linkages would be less than significant, and no mitigation is required.

Alternatively, if the results of the biological survey determine that wildlife corridors and habitat linkages are present, indirect impacts to sensitive wildlife species could occur.

As previously discussed in Section 6.1.2.2, indirect impacts to wildlife corridors and habitat linkages from hydrologic changes, including erosion, stormwater runoff, and pollution discharges, would be reduced through project compliance with NPDES Construction General Permit provisions.

However, indirect impacts to wildlife corridors and habitat linkages from lighting and increased human activity could result. Therefore, indirect impacts to wildlife corridors and habitat linkages would be considered potentially significant without mitigation.

6.4.3 Mitigation Measures

If wildlife corridors and habitat linkages are identified, during pre-project/activity biological resources survey pursuant to Mitigation Measures BIO-1, development of the Project area could result in potentially significant direct and indirect impacts to wildlife corridors and habitat linkages in the Project area. Implementation of Mitigation Measures BIO-3 through BIO-6 (described under Sensitive Plant and Wildlife Species Direct Impacts Mitigation) would reduce direct and indirect impacts to wildlife corridors and habitat linkages through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, creating new vegetation communities and restoring impacted ones, and conducting sensitive bird and wildlife species focused surveys prior to construction.

6.4.4 Significance After Mitigation

Potential direct and indirect impacts to wildlife corridors and habitat linkages would be less than significant with implementation of Mitigation Measures BIO-3 through BIO-6.

6.5 Threshold 5: Local Policies and Ordinances

6.5.1 Guidelines for Determination of Significance

A significant impact would result if the Project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

6.5.2 Impact Analysis

As discussed in Sections 6.1 through 6.4, the Project's potential impacts to sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages would be potentially significant before incorporation of mitigation. However, implementation of mitigation measures that fully mitigate impacts to sensitive plant and wildlife species, sensitive vegetation communities, jurisdictional aquatic resources, and wildlife corridors and habitat linkages discussed in those sections, would fully mitigate for potential impacts to these resources (Mitigation Measures 1 through 9). Additionally, the Focused General Plan Update provides policies that would protect sensitive plant and wildlife species, critical habitat, and sensitive vegetation communities in the Project area.

Therefore, projects to be facilitated by the Focused GPU would comply with local policies and ordinances protecting biological resources set forth in the Focused General Plan Update. With incorporation of Mitigation Measures BIO-1 through BIO-9, implementation of the Project would not result in impacts to protected biological resources, and the Project would not conflict with any local policies or ordinances protecting biological resources. Impacts would be less than significant.

6.5.3 Mitigation Measures

Implementation of Mitigation Measures BIO-1 through BIO-9 (described under Thresholds 1 through 4 in Sections 6.1.3, 6.2.3, 6.3.3, and 6.4.3) ensures no significant impacts would occur to biological resources through conducting pre-construction surveys, focused sensitive plant and wildlife species surveys, focused bird species surveys, requiring sensitive vegetation communities impacts mitigation, habitat restoration for temporary impacts, a qualified monitoring biologist during construction, conducting an aquatic resources delineation, and obtaining resource agency permits.

6.5.4 Significance After Mitigation

Implementation of Mitigation Measures BIO-1 through BIO-9 would mitigate all direct and indirect permanent and temporary impacts to biological resources to below a level of significance,

and any additional protection measures set forth in the Focused General Plan Update would be implemented, as necessary, thereby resulting in the Project's compliance with local policies or ordinances.

6.6 Threshold 6: Regional Conservation Planning

6.6.1 Guidelines for Determination of Significance

A significant impact would result if the Project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

6.6.2 Impact Analysis

The Project area is not within an adopted Habitat Conservation Plan and is not subject to the NCCP program or other regional conservation plan. Therefore, no impacts to local or regional conservation plans would occur from implementation of the Project, and no protection measures are required.

6.6.3 Mitigation Measures

No mitigation is required.

6.6.4 Significance After Mitigation

No mittigation is required, therefore impact without mitigation incorporated.

6.7 Cumulative Impacts

6.7.1 Cumulative Threshold 1: Sensitive Plant and Wildlife Species

Cumulative projects within the vicinity of the Project area would have the potential to result in impacts to sensitive plant and wildlife species, including loss of habitat.

The remaining areas within Orange County, as well as adjacent and nearby jurisdictions, including Los Angeles County to the north, San Bernardino County and Riverside County to the east, and San Diego County to the south, would be required to comply with applicable federal and state regulations that provide protections for sensitive plant and wildlife species, such as the federal Endangered Species Act, California Endangered Species Act, and the California NCCP Act. In addition, some projects that impact sensitive species require approval from the USFWS and CDFW. If significant impacts occur from particular cumulative projects, then mitigation measures are implemented to reduce impacts to the extent feasible in compliance with CEQA.

As discussed in Section 6.1, development of the Project area would have the potential to impact sensitive plant and wildlife species. Because cumulative projects, would be required to implement

project-specific mitigation measures and obtain applicable approval from the CDFW and/or USFWS to reduce the Project's impacts to sensitive plant and wildlife species to below a level of significance, the Project would not contribute to a cumulatively significant impact. Therefore, the Project's contribution to impacts on sensitive plant and wildlife species would not be cumulatively considerable.

6.7.2 Cumulative Threshold 2: Riparian Habitat or Other Sensitive Natural Community

Cumulative projects in the vicinity of the Project area would have the potential to result in impacts associated with riparian habitat and other sensitive natural communities through direct and indirect loss or degradation.

The remaining areas within Orange County, as well as adjacent and nearby jurisdictions, including Los Angeles County to the north, San Bernardino County and Riverside County to the east, and San Diego County to the south, would be required to comply with applicable federal and state regulations such as the California Lake and Streambed Alteration Program or the California NCCP Act. These programs provide protections for riparian and other sensitive habitats. In addition, many projects that affect riparian or other protected habitat types require approval from the USFWS and CDFW. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible.

As discussed in Section 6.2, development of the Project area would have the potential to impact sensitive vegetation communities. Any projects approved within the City's jurisdiction would be required to implement project-specific mitigation measures to mitigate the Project's impacts to riparian habitat or other sensitive communities to below a level of significance. Therefore, the Project's contribution to impacts on riparian habitat and other sensitive natural communities would not be cumulatively considerable.

6.7.3 Cumulative Threshold 3: Jurisdictional Aquatic Resources

Cumulative projects located in the vicinity of the Project area would have the potential to result in a cumulative impact associated with federally or state protected aquatic resources.

The remaining areas within Orange County, as well as adjacent and nearby jurisdictions, including Los Angeles County to the north, San Bernardino County and Riverside County to the east, and San Diego County to the south, would be required to comply with applicable federal and state regulations such as the California Lake and Streambed Alteration Program, Sections 401 and 404 of the CWA, and the Porter-Cologne Act.

Existing regulations would ensure that a significant cumulative impact associated with federally or state protected aquatic resources would not occur. If potentially significant impacts would occur

from particular cumulative projects, then mitigation measures would be implemented to reduce impacts as required to meet the regulatory agency's no-net-loss standard. As discussed in Section 6.3, the Project would avoid impacts to jurisdictional aquatic resources to the greatest extent feasible, providing compensatory mitigation at an approved ratio for unavoidable impacts, and would not contribute to cumulative impacts to jurisdictional aquatic resources as a result. Projects in the City and in surrounding cities are required to comply with existing regulatory requirements and obtain applicable permits from the USACE, RWQCB, and CDFW. Therefore, the Project's contribution would not be cumulatively considerable.

6.7.4 Cumulative Threshold 4: Wildlife Corridors and Habitat Linkages

Cumulative projects located within the vicinity of the Project area would have the potential to result in a cumulative impact associated with wildlife movement corridors and habitat linkages.

The remaining areas within Orange County, as well as adjacent and nearby jurisdictions, including Los Angeles County to the north, San Bernardino County and Riverside County to the east, and San Diego County to the south, would be required to comply with applicable federal and state regulations such as the California NCCP Act, which supports the continued provision of wildlife movement corridors. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible.

As discussed in Section 6.4, Threshold 4: Wildlife Corridors and Habitat Linkages, development of the Project would have the potential to impact wildlife corridors or habitat linkages. Any projects would be required to implement project-specific mitigation measures to mitigate the Project's impacts to wildlife corridors or habitat linkages to below a level of significance. Therefore, the Project would not contribute to a cumulatively significant impact, and the Project's contribution would not be cumulatively considerable.

6.7.5 Cumulative Threshold 5: Local Policies or Ordinances

Cumulative projects located in the vicinity of the Project area would have the potential to result in a cumulative impact associated with conflicts with local policies or ordinances.

The remaining areas within Orange County, as well as adjacent and nearby jurisdictions, including Los Angeles County to the north, San Bernardino County and Riverside County to the east, and San Diego County to the south, would be required to comply with applicable local policies or ordinances. If potentially significant impacts would occur from particular cumulative projects, then mitigation measures would be implemented to reduce impacts to the extent feasible.

As discussed in Section 6.5, Threshold 5: Local Policies and Ordinances, the Project would comply with local policies and ordinances protecting biological resources in the updated Brea General Plan. A significant cumulative impact associated with a conflict with a local policy or ordinance

would not occur. Therefore, the Project, in combination with other cumulative projects, would not result in a significant cumulative impact. The Project's contribution would not be cumulatively considerable.

6.7.6 Cumulative Threshold 6: Regional Conservation Planning

As discussed in Section 6.6.2, the Project area is not within an adopted Habitat Conservation Plan and is not subject to the NCCP program or other regional conservation plan. Therefore, the Project, in combination with other cumulative projects, would not result in a significant cumulative impact from conflicts with regional conservation plans. The Project's contribution would not be cumulatively considerable.

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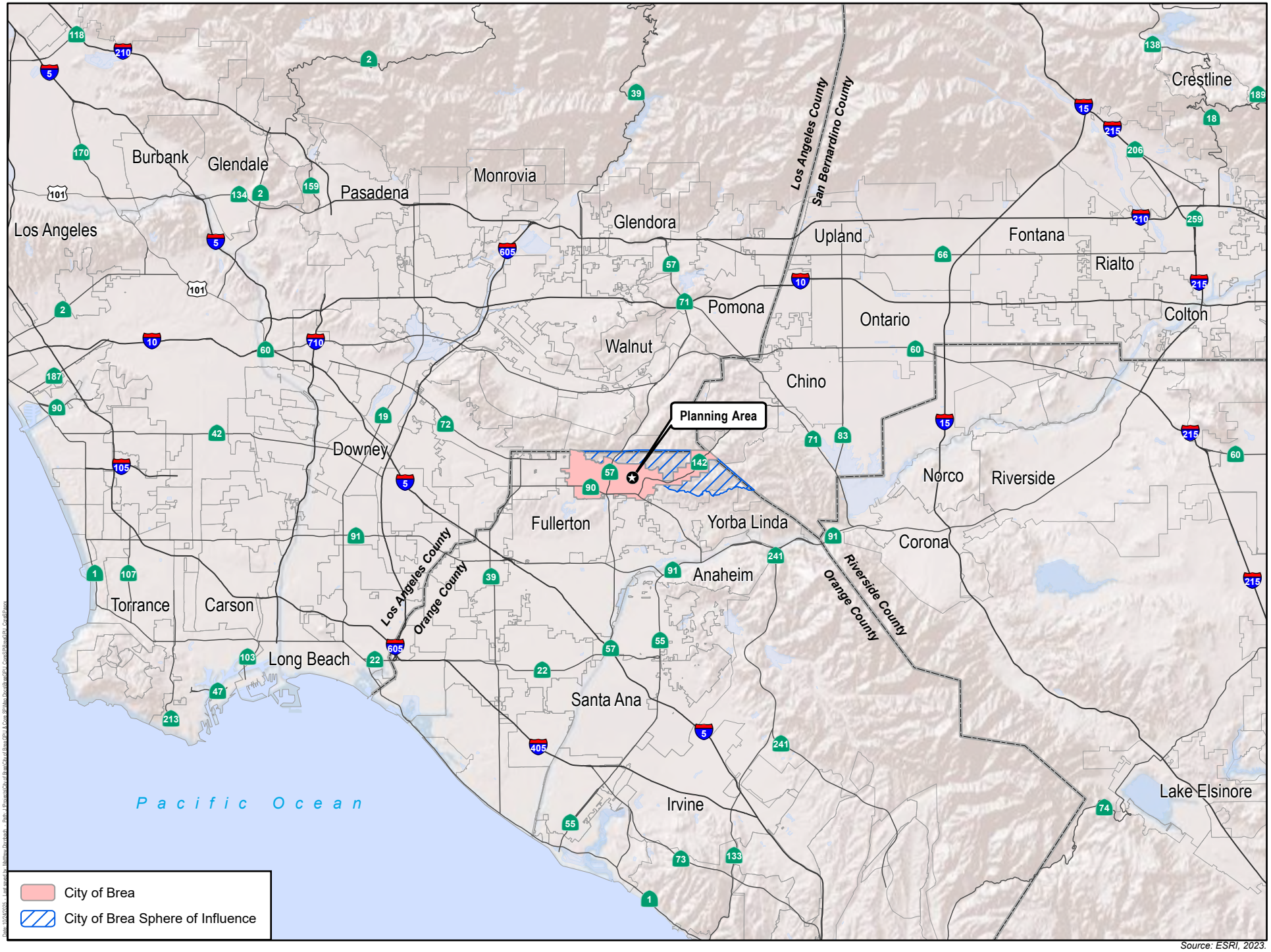
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Appendix A. Figures

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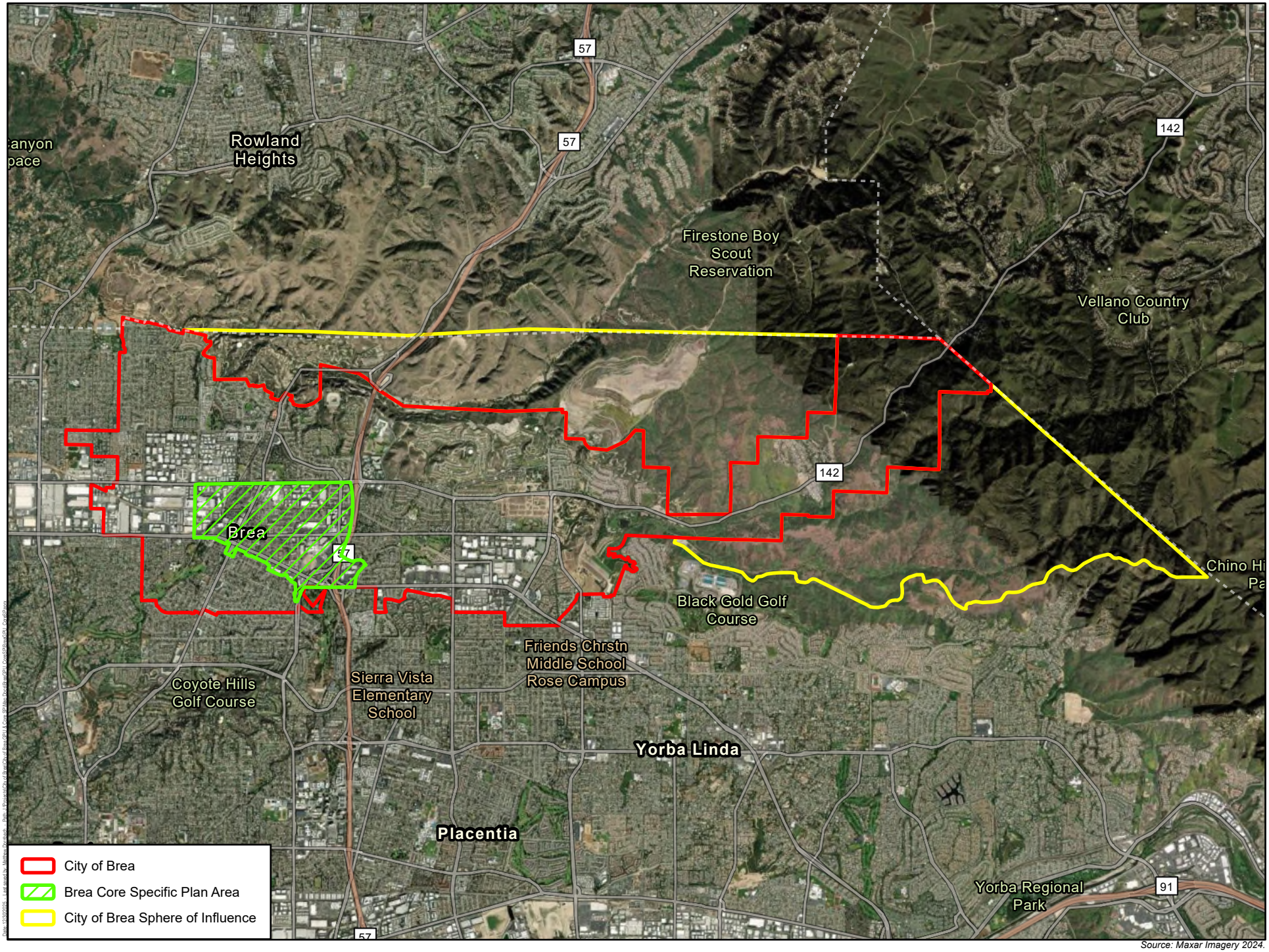
Source: ESRI, 2023.

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Figure 1

Regional Location

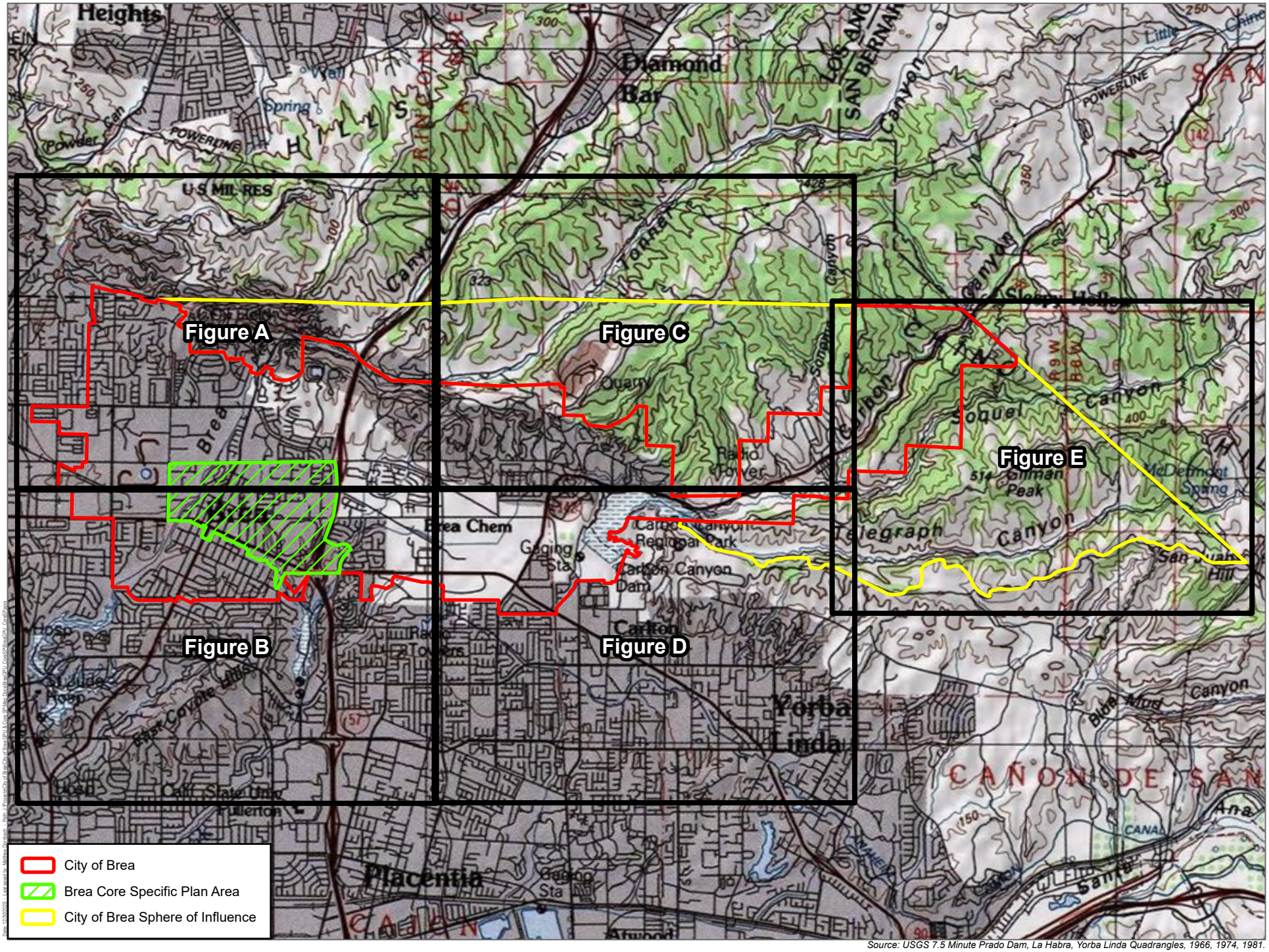
Brea Focused General Plan Update and Brea Core Specific Plan



Source: Maxar Imagery 2024.

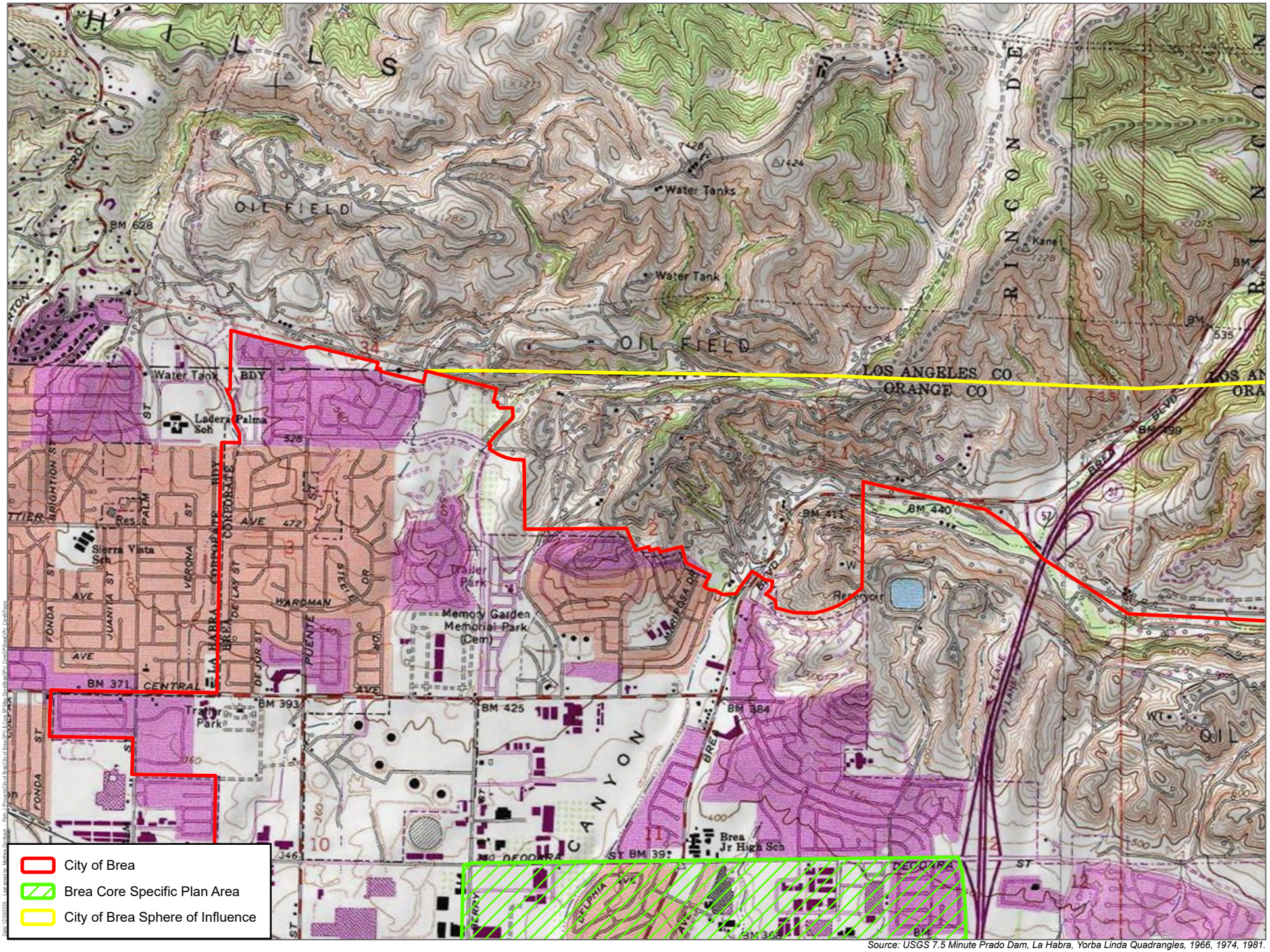
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Figure 2
Project Location
Brea Focused General Plan Update and Brea Core Specific Plan



Source: USGS 7.5 Minute Prado Dam, La Habra, Yorba Linda Quadrangles, 1966, 1974, 1981.

Figure 3
USGS Topographic Map
Brea Focused General Plan Update and Brea Core Specific Plan



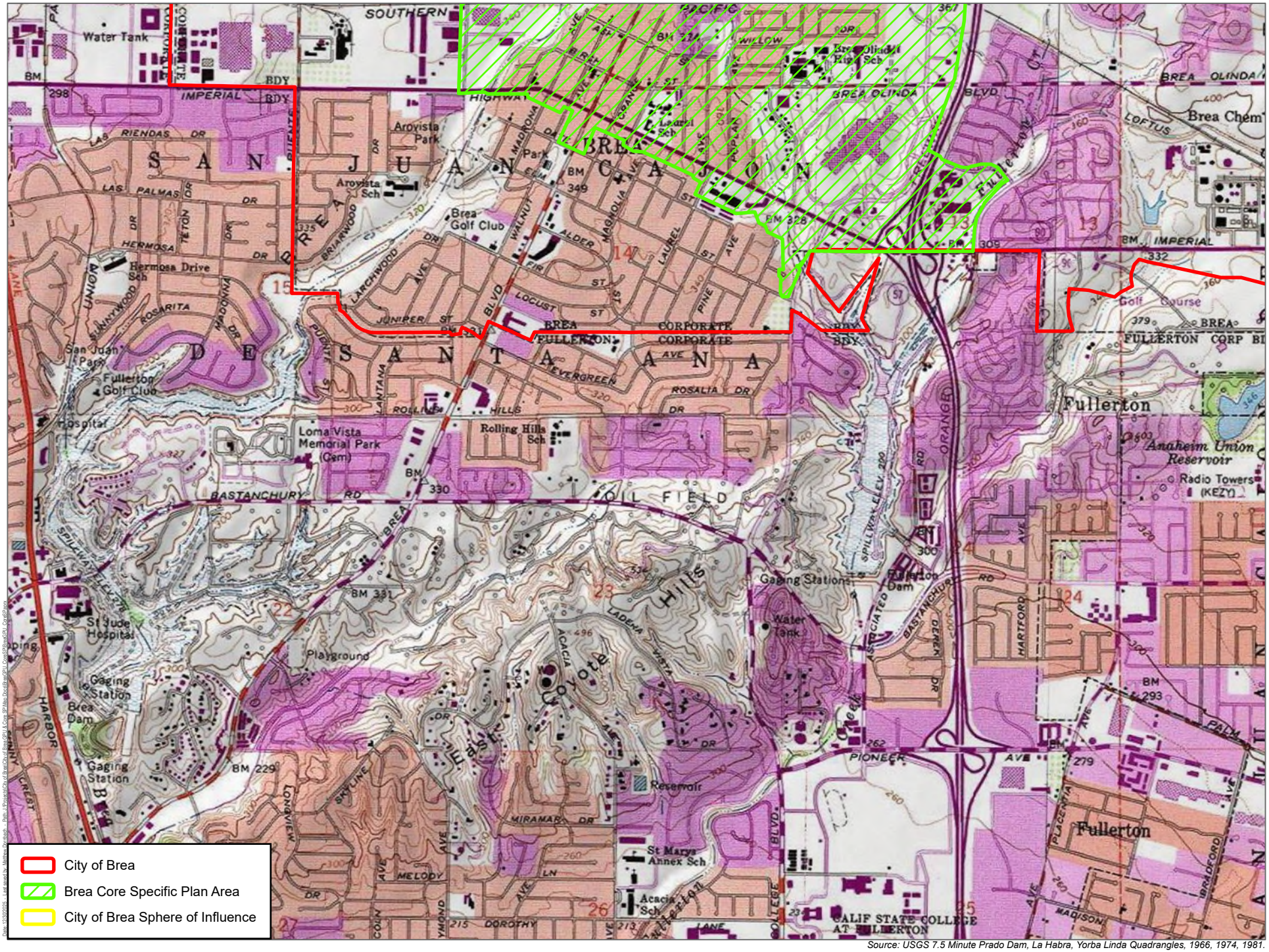
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Figure 3a

USGS Topographic Map

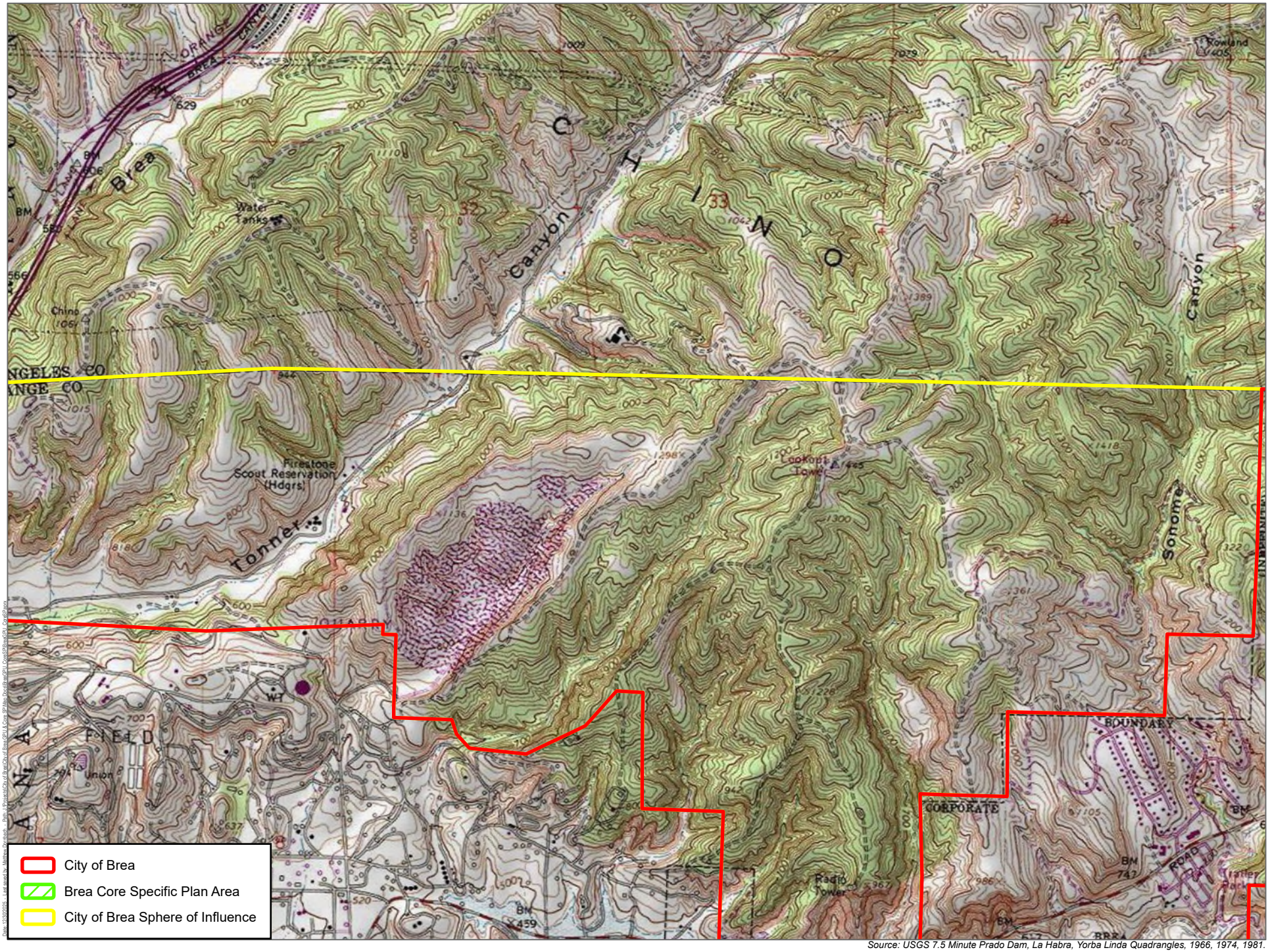
Brea Focused General Plan Update and Brea Core Specific Plan



Source: USGS 7.5 Minute Prado Dam, La Habra, Yorba Linda Quadrangles, 1966, 1974, 1981.

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Figure 3b
USGS Topographic Map
Brea Focused General Plan Update and Brea Core Specific Plan



Source: USGS 7.5 Minute Prado Dam, La Habra, Yorba Linda Quadrangles, 1966, 1974, 1981.

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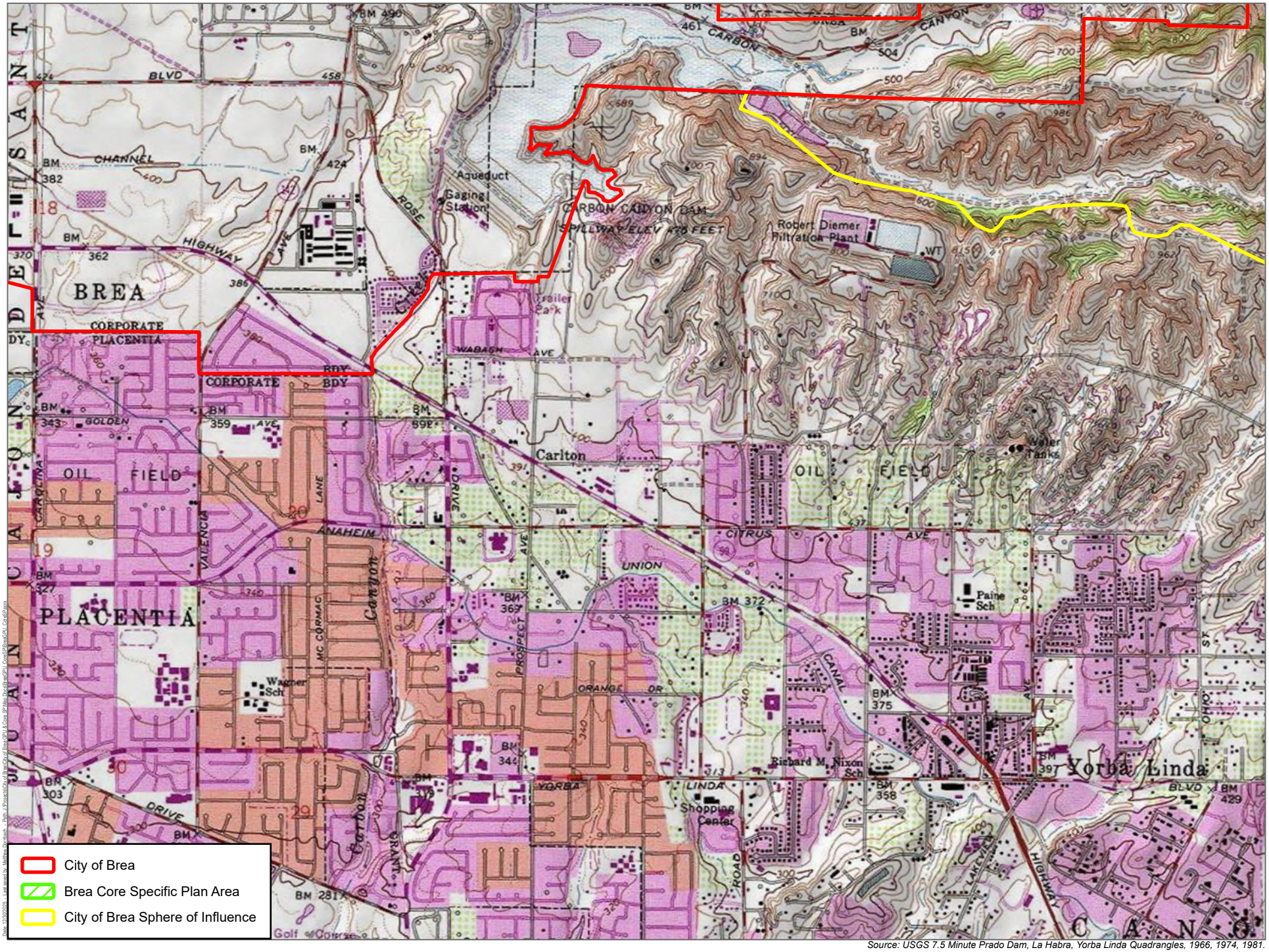
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US Feet

Figure 3c

USGS Topographic Map

Brea Focused General Plan Update and Brea Core Specific Plan



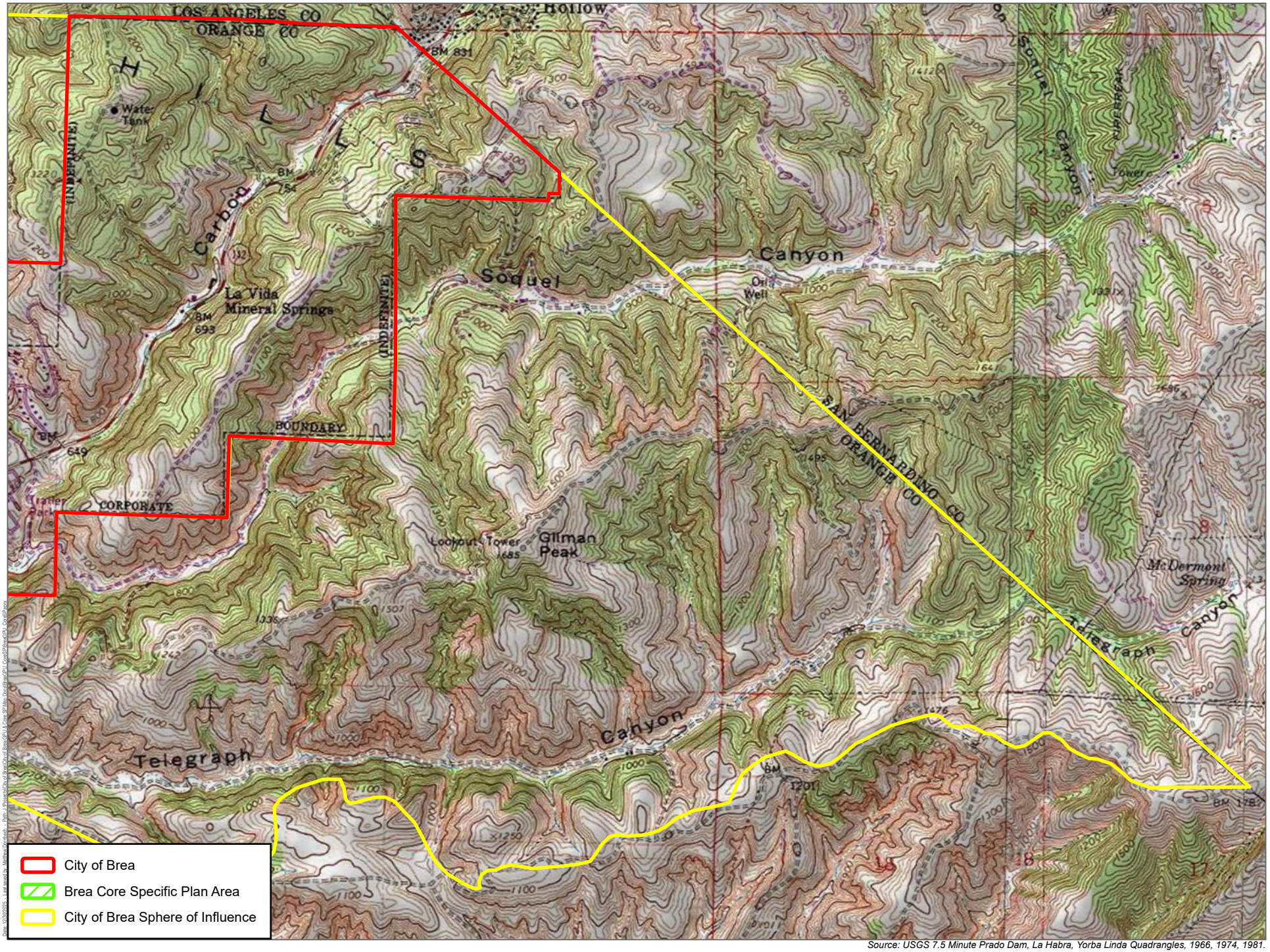
Source: USGS 7.5 Minute Prado Dam, La Habra, Yorba Linda Quadrangles, 1966, 1974, 1981.

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Figure 3d

USGS Topographic Map

Brea Focused General Plan Update and Brea Core Specific Plan



Source: USGS 7.5 Minute Prado Dam, La Habra, Yorba Linda Quadrangles, 1966, 1974, 1981.

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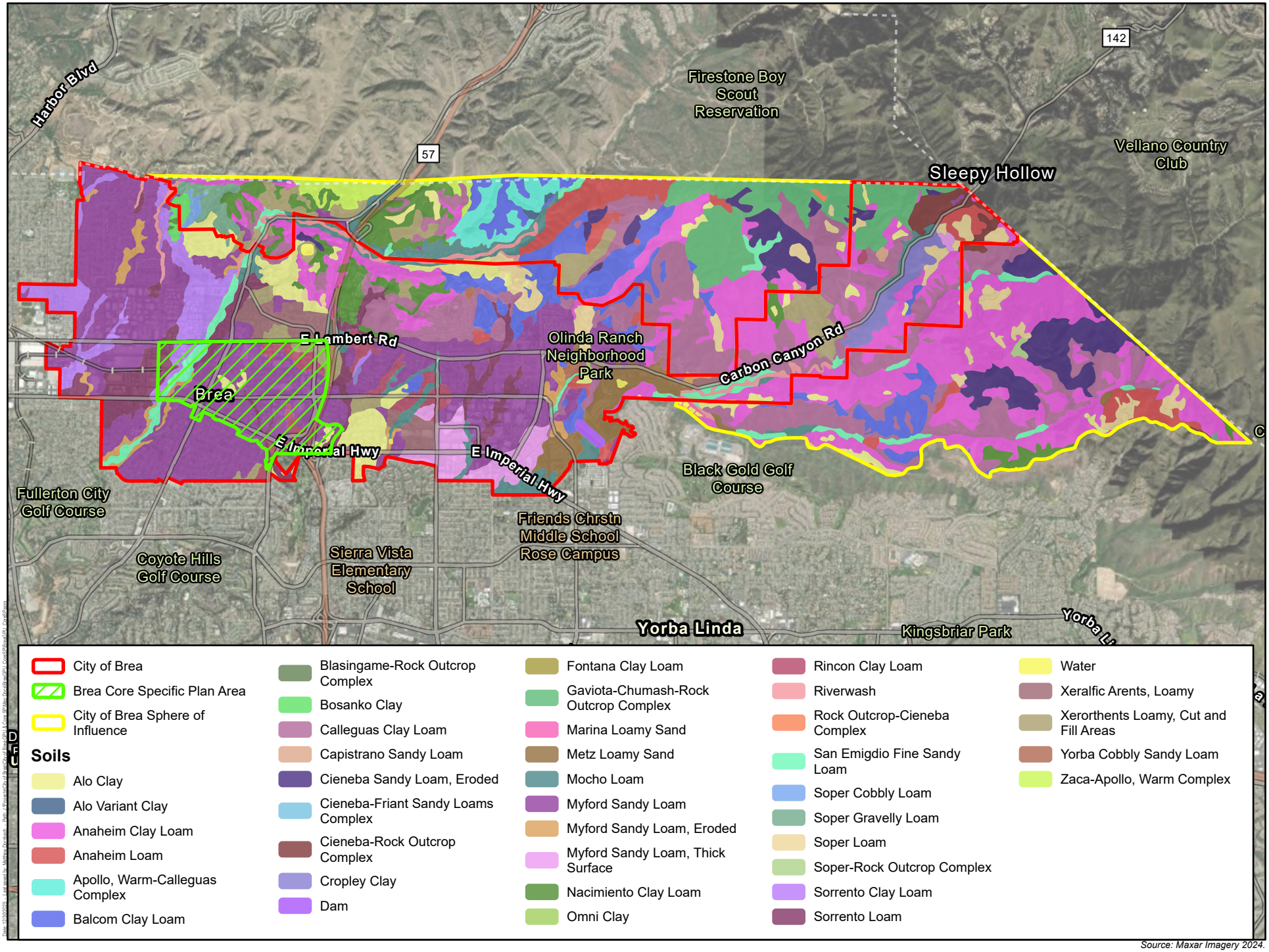
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US Feet

Figure 3e

USGS Topographic Map

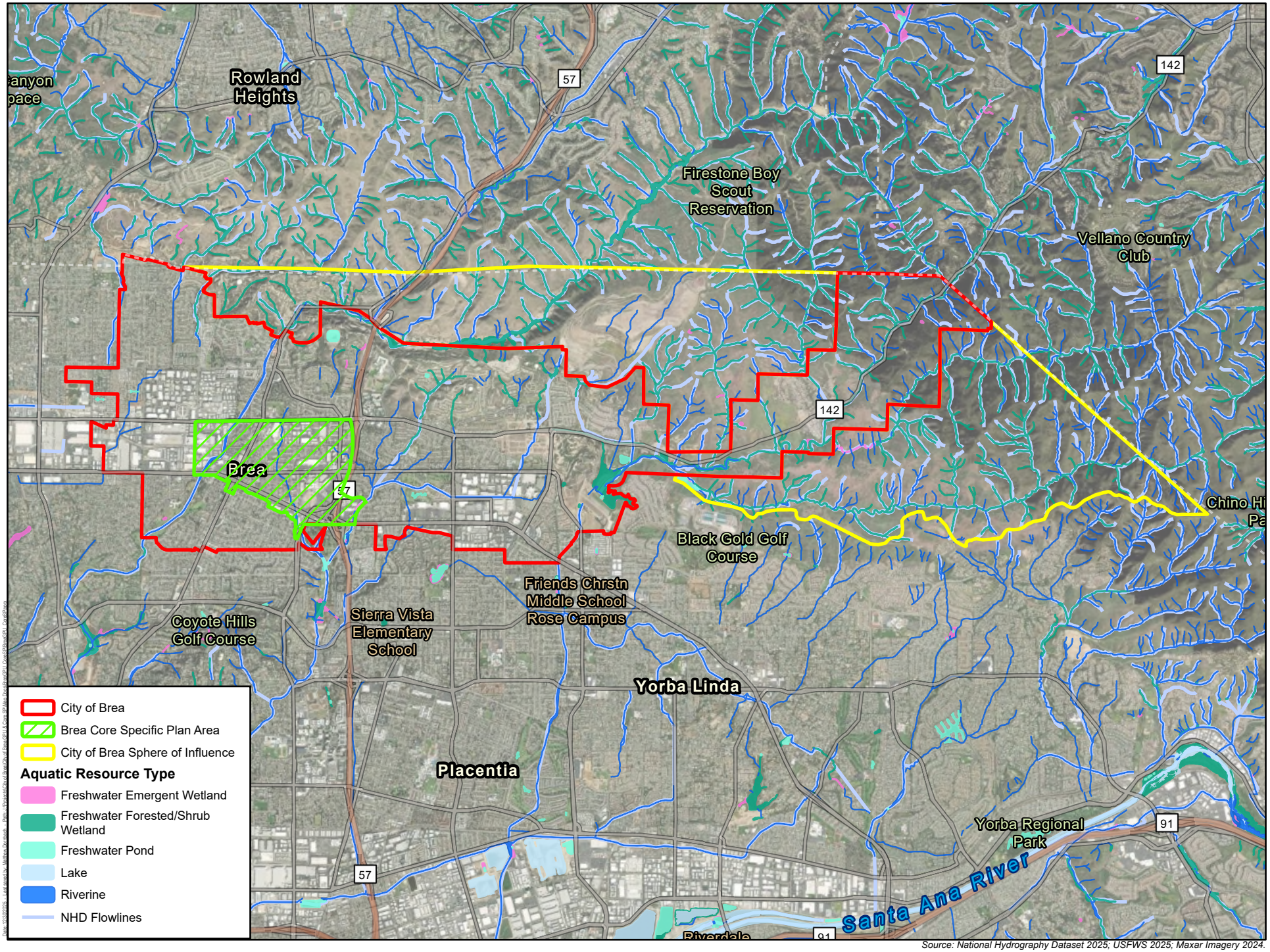
Brea Focused General Plan Update and Brea Core Specific Plan



Source: Maxar Imagery 2024.

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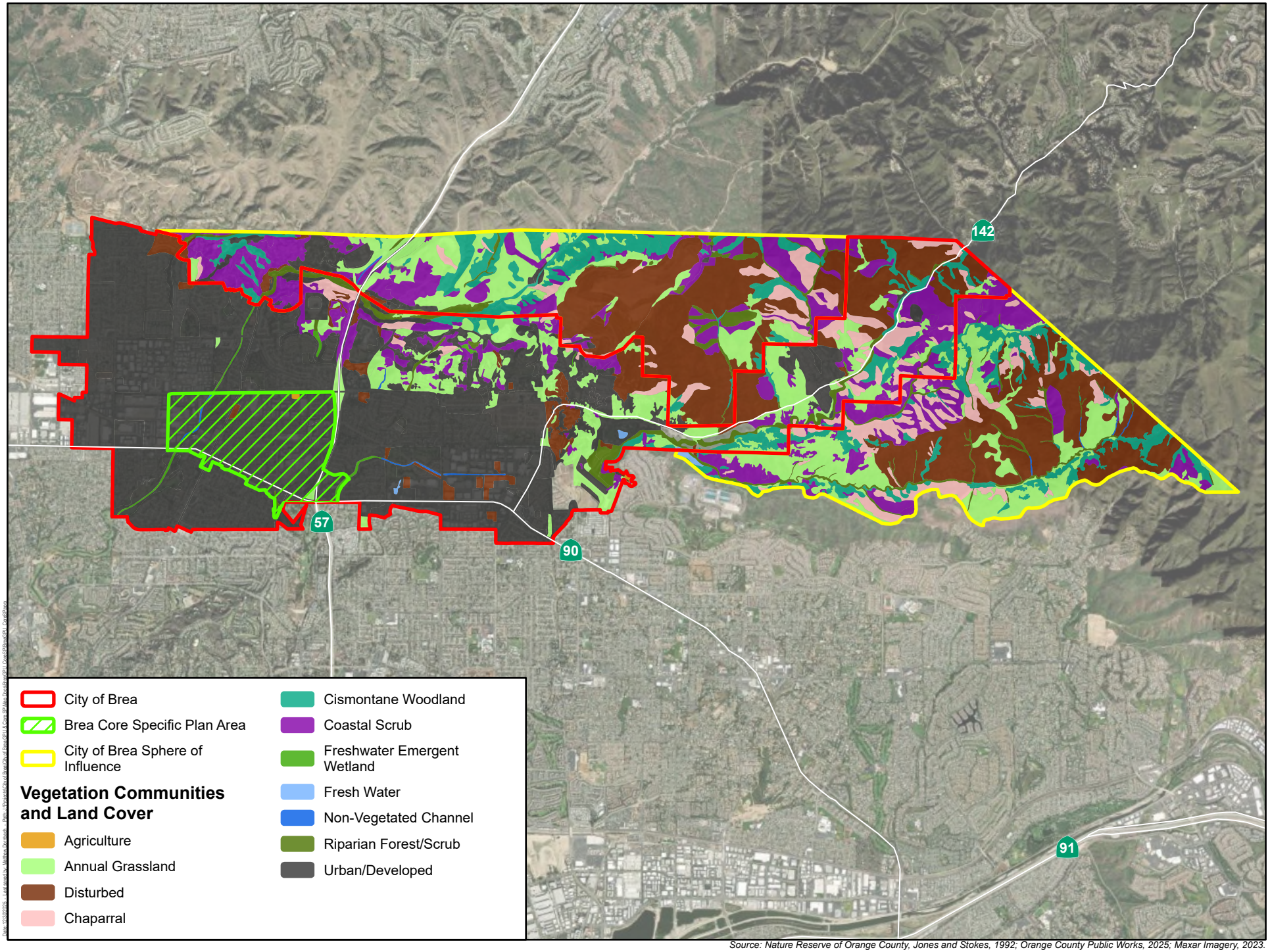
Figure 4
Soils



Source: National Hydrography Dataset 2025; USFWS 2025; Maxar Imagery 2024.

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Figure 5
Hydrology



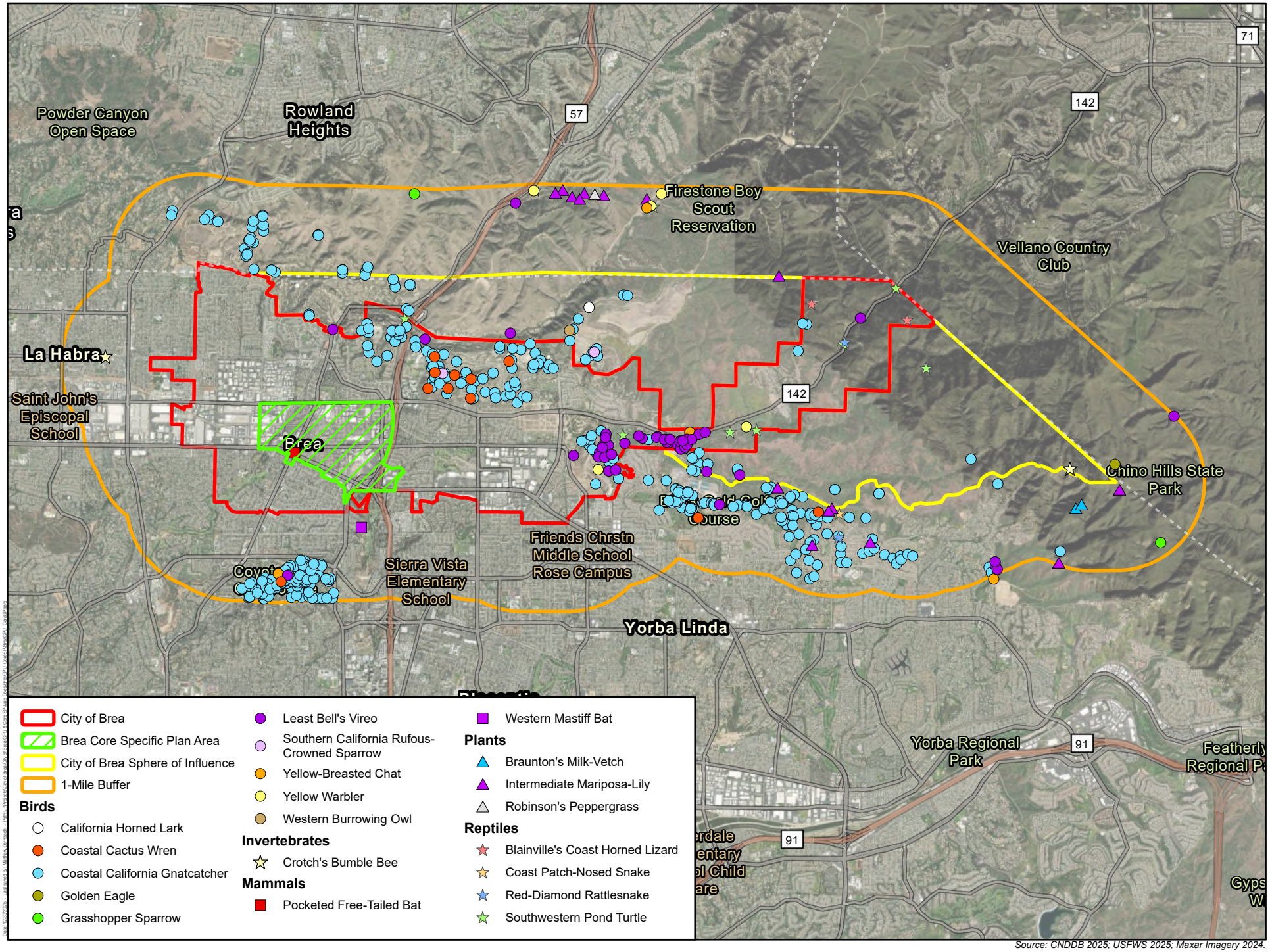
Source: Nature Reserve of Orange County, Jones and Stokes, 1992; Orange County Public Works, 2025; Maxar Imagery, 2023.

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0 0.5 1
Miles

Figure 6
Vegetation Communities and Land Cover Types
Brea Focused General Plan Update and Brea Core Specific Plan



Source: CNDDB 2025; USFWS 2025; Maxar Imagery 2024.

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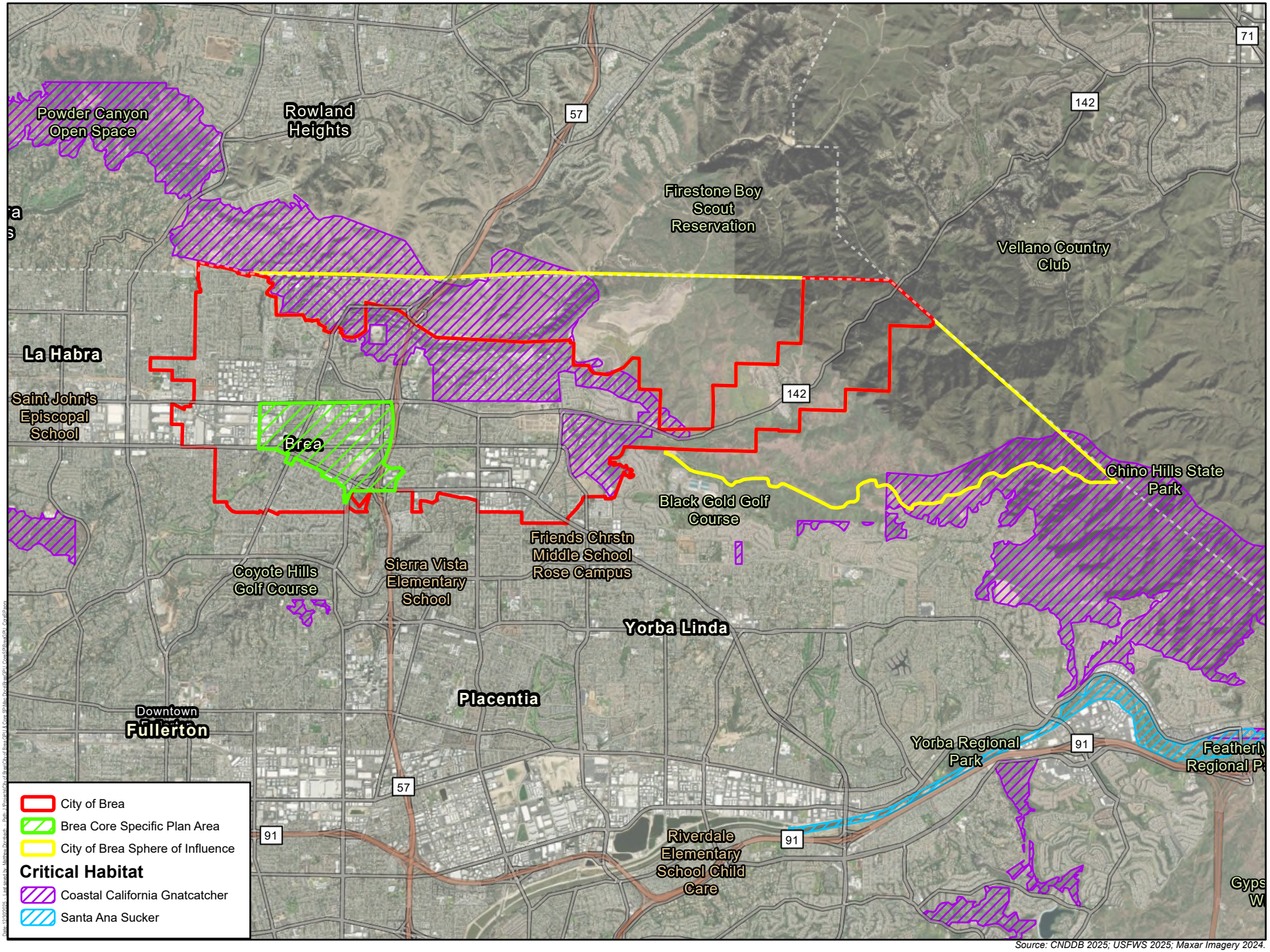
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Figure 7

Historical Species with Potential to Occur

Brea Focused General Plan Update and Brea Core Specific Plan



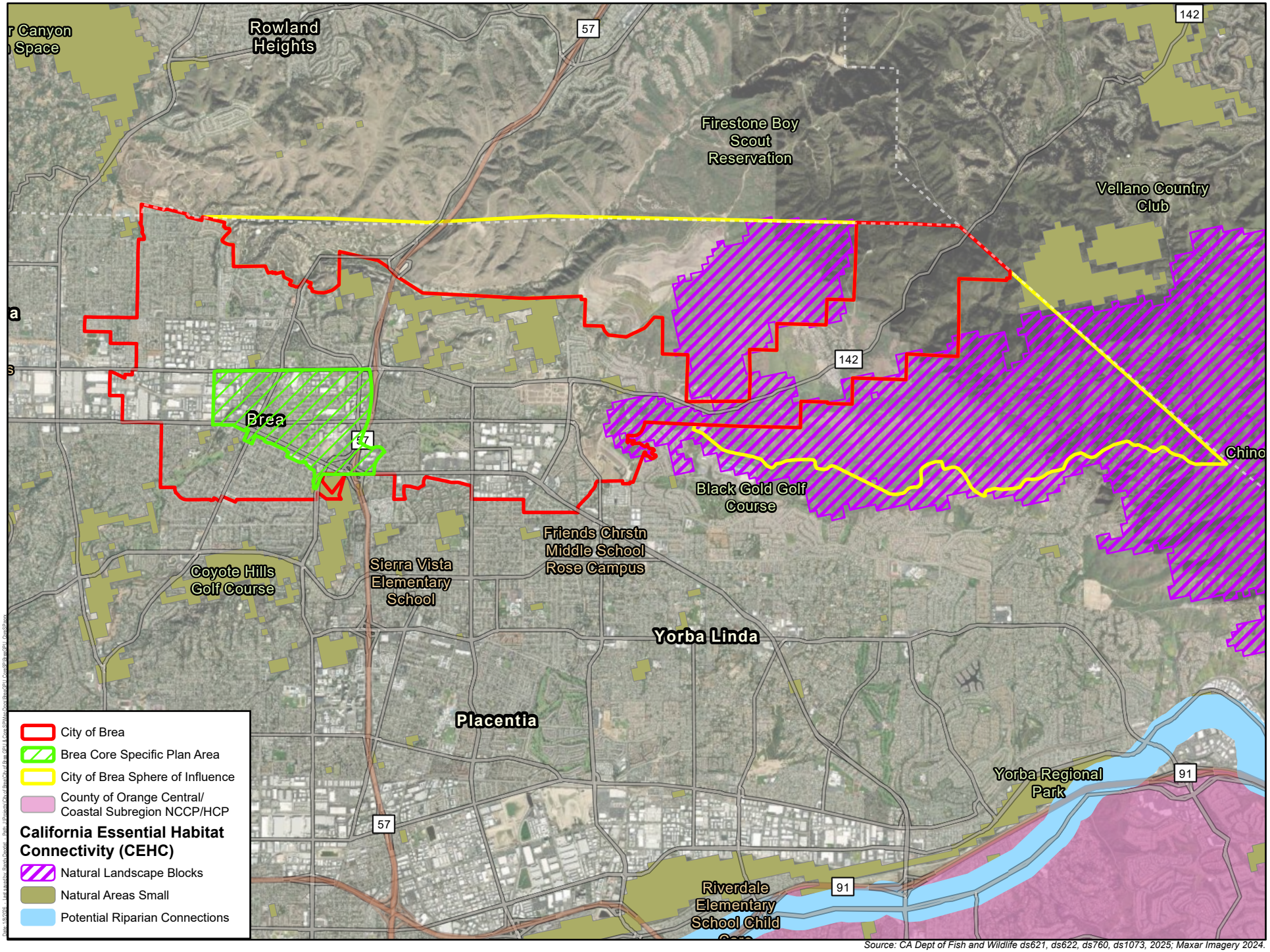
Source: CNDDB 2025; USFWS 2025; Maxar Imagery 2024.

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Miles

Figure 8
Critical Habitat



Source: CA Dept of Fish and Wildlife ds621, ds622, ds760, ds1073, 2025; Maxar Imagery 2024.

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Figure 9
Wildlife Corridor/NCCPs
Brea Focused General Plan Update and Brea Core Specific Plan