4.3 BIOLOGICAL RESOURCES

The analysis presented in this section assesses impacts on biological resources that would result from construction and operation of the proposed project. The impact analysis is based on the February 2011 *Biological Report* (Biological Report; Appendix C) for the project site, a peer review of that analysis, and additional information. The study area identified in the Biological Report is 17.80 acres in size and includes the project site, the area adjacent to Cathedral Oaks Road south of the project site, and the adjacent area between Northgate Drive and the western property line.

4.3.1 Existing Conditions

4.3.1.1 Project Area

The project site is surrounded by the Glen Annie Golf Course to the north and east, Glen Annie Golf Course and El Encanto Creek to the west, and Cathedral Oaks Road to the south. Within the vicinity of the project are residential and recreational uses, including a multi-family residential development to the west and single-family residences located off of Cathedral Oaks Road to the south. North of Cathedral Oaks Road, El Encanto Creek, part of the Devereux Slough watershed, traverses the Glen Annie Golf Course property and then travels onto agricultural lands planted in avocados. The portion of the watershed above Cathedral Oaks Road is approximately 289 acres in size, and the portion below Cathedral Oaks Road is 775 acres in size, for a total of 1,065 acres. South of Cathedral Oaks Road, El Encanto Creek passes through several residential neighborhoods and commercially developed areas and ultimately flows into Devereux Slough and the Pacific Ocean.

The habitats and wildlife resources of the area reflect those typically found within the coastal plains of Southern California. Much of the coastal plain in the Goleta area between the Santa Ynez Mountains and Pacific Ocean has been developed or disturbed by agriculture or ranching uses. Relatively undisturbed habitats and areas of native vegetation are present along narrow riparian corridors, scattered undeveloped lands of varying sizes, and in protected open space areas. Native vegetation within the City of Goleta consists primarily of riparian and upland woodlands and coastal scrub.

4.3.1.2 Project Site

The 15.8-acre project site currently contains a 2,015-square-foot residence, 726-square-foot garage, and 1,152-square-foot barn. El Encanto Creek borders the project site on its western side for approximately 630 feet, although the creek's bed and banks are just to the west of the property. For this analysis, the project site and El Encanto Creek equal the study area (Figure 4-3-1). The U.S. Geological Survey (USGS) mapped the creek as having intermittent flow. Pursuant to the GP/CLUP Conservation Element CE Subpolicy 2.2, a Streamside Protection Area (SPA) associated with El Encanto Creek extends 100 feet on either side of the creek. Technically, the SPA does not extend north of Cathedral Oaks Road, because at this location the creek is in unincorporated Santa Barbara County, but the properties on either side of the creek are within the City. For the purposes of this analysis, the SPA is considered to extend across Cathedral Oaks Road and approximately 100 feet onto the Shelby property on the west side. Per the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory, there are no wetland resources on the project site as defined under Section 404 of the federal Clean Water Act (CWA) (USFWS 2013).

East of the creek on the western side of the property is an area that is primarily bare ground used for storage of firewood and woodchips. Nonnative annual grassland dominates the center of the project site. The area containing nonnative grassland is periodically mowed to control weeds and prevent fires. Soils on site consist of Diablo clay, which is considered well-drained and formed from shale and mudstone. The property was a productive avocado orchard up until the late 1990s when the trees became diseased due in part to an EI Niño event. The bulk of the avocado trees were removed between 1998 and 2002 by the property owner except for few trees in the northernmost corner of the property, which are no longer in production.

The project site slopes from north to south at an average grade of approximately 7.8 percent. The existing elevation on the property ranges from 145 feet above mean sea level along Cathedral Oaks Road northward to 252 feet above mean sea level at the northeast corner of the property.

4.3.1.3 Vegetation and Land Cover

Within the study area, ten vegetation types and four land cover types were identified. The acreages of vegetation and land cover types are summarized in Table 4.3-1. Figure 4.3-1 depicts the locations of the existing vegetation and land cover types. Each of the vegetation types present in the study area is described below.

A total of 81 different species of plants were observed in the study area and approximately 90% of the species present were nonnative. The number of nonnative plant species is higher than normal, but reflects the fact that the site had been farmed for a number of years. Most of the native plants in the study area are on the bed and banks of El Encanto Creek on the Glen Annie Golf Course property.

TABLE 4.3-1
EXISTING VEGETATION AND LAND COVER TYPES IN THE STUDY AREA

Vegetation and Land Cover Type	Area (acres)
Vegetation Types	
***Avena fatua, Bromus diandrus* Semi-natural Herbaceous Stand (nonnative annual grassland dominated by wild oat and ripgut brome)** This grassland exists along the Cathedral Oaks Road and Northgate Drive shoulders and comprises a mixture of annual nonnative grasses and herbs. The dominant species in this vegetation type are wild oat and ripgut brome. Other species found in this nonnative annual grassland include: English plantain, smilo grass, Italian rye, soft chess, foxtail, rattail fescue, wild radish, black mustard, fennel, cheeseweed, common vetch, and bur clover.	1.22
***Eucalyptus globules* Semi-natural Woodland with olive tree association (eucalyptus grove with olive tree understory)** This type of woodland exists on the Glen Annie Golf Course property, adjacent to (west of) the Shelby property. The dominant vegetation in this vegetation type is blue gum eucalyptus with a dense olive tree understory. Other vegetation present within this woodland includes: Peruvian pepper, toyon, poison oak, periwinkle, coyote brush, Santa Barbara Honeysuckle, and a few scattered coast live oak tree saplings.	0.97

Vegetation and Land Cover Type	Area (acres)
***Hordeum murinum, Erodium cicutarium* Semi-natural Herbaceous Stand (nonnative annual grassland dominated by foxtail and redstem filaree)** This vegetation type occurs in the central portion of the project site in areas that previously contained avocado orchards and that were periodically planted in row crops. This vegetation type is also called "Agrestral," a term coined by Holland and Keil (1990), which applies to vegetation in areas that have historically been cultivated but are now fallow. The dominant species in this vegetation type are a nonnative annual grass known as foxtail and a nonnative annual herb called redstem filaree. Other species present in this nonnative annual grassland include: bristly ox tongue, scarlet pimpernel, cheeseweed, prickly sow-thistle, bur clover, petty spurge, smilo grass, kikuyu grass, annual blue grass, sour-grass, ripgut brome, and wild oat.	8.49
***Lonicera subspicata* ssp. *Subspicata* Shrubland Alliance (coastal sage scrub dominated by Santa Barbara honeysuckle)** This vegetation type occurs on the Glen Annie Golf Course property on the banks of EI Encanto Creek. Santa Barbara honeysuckle is the dominant species present in this coastal sage scrub vegetation type. This plant is a perennial shrub with long, flexible stems that form dense, impenetrable mats and thickets. The only other species observed in this vegetation type is poison oak.	0.08
Orchard (avocado) This vegetation type occurs in the northernmost portion of the Shelby property. The avocado orchard in this portion of the property is not actively managed and is considered to be an abandoned orchard. The understory vegetation consists of the same species described above in the *Hordeum murinum, Erodium cicutarium* Semi-natural Herbaceous Stand (nonnative annual grassland dominated by foxtail and redstem filaree).	0.88
Ornamental landscape trees and shrubs This vegetation type includes the myoporum shrub hedges planted around the western and northern perimeter of the property, acacia and pepper trees that line the existing driveway, strawberry trees planted along the Cathedral Oaks Road shoulder, and assorted ornamental landscape trees and plants around the existing structures on the property.	1.07
Ornamental landscape turf grass This vegetation type exists adjacent to the single-family residence and is an irrigated lawn maintained by the resident living on the property.	0.16
***Salvia mellifera* Shrubland Alliance (coastal sage scrub dominated by black sage)** This vegetation type occurs on the Glen Annie Golf Course property near the Cathedral Oaks Road EI Encanto Creek crossing. The vegetation in this area was planted as part of the habitat restoration/mitigation effort for the Cathedral Oaks Road extension. The dominant species in this area is black sage. Other species present in this community include: California sagebrush, Santa Barbara honeysuckle, coyote brush, and mugwort.	0.09
***Salix lasiolepis* Shrubland Alliance (riparian scrub dominated by arroyo willow)** This vegetation type exists along the bed and banks of EI Encanto Creek on the Glen Annie Golf Course property west of the Shelby property. The dominant tree in this vegetation community is arroyo willow. Other species present include: poison oak, wild blackberry, and elderberry.	0.93
Ruderal (dominated by castor bean, fennel, and Russian thistle) This vegetation type occurs along the eastern edge of the Shelby property and in a small patch in the central portion of the property. *Ruderal* is a term that is applied to weedy vegetation that typically occurs in recently disturbed areas. The dominant species in the vegetation type are castor bean, fennel, and Russian thistle. Other species present in this community include: black mustard, smilo grass, Douglas nightshade, Italian thistle, cheeseweed, and bur clover.	0.28
Subtotal Vegetation Types	**14.17**
Land Cover Types	
Asphalt pavement (roads and driveways)	0.34
Dirt road	0.30
Structure	0.12
Wood chips, mulch, and bare ground	2.78
Subtotal Land Cover Types	**3.54**
Grand Total Vegetation and Land Cover	**17.71**

4.3.1.4 Environmentally Sensitive Habitat Area

El Encanto Creek and its associated riparian corridor exist in a predominantly rural setting. The creek, which is adjacent to the western boundary of the project, is a major drainage with a watershed of 1,065 acres and has been mapped as an Environmentally Sensitive Habitat Area (ESHA) by the City of Goleta. Technically, as described above for the SPA, the ESHA does not extend north of Cathedral Oaks Road, because at this location the creek is in unincorporated Santa Barbara County, but the properties on either side of the creek are within the City. For the purposes of this analysis, the ESHA is considered to extend across Cathedral Oaks Road adjacent to the Shelby property. Biological functions associated with the ESHA include the use of the riparian area as a wildlife movement corridor; nesting habitat for a variety of bird species adapted to utilize riparian ecosystems; protection of water quality and prevention of creek erosion; and potential habitat for a variety of amphibians and aquatic species. The portion of El Encanto Creek within the study area provides potential habitat for several federal- and/or state-listed species, including red-legged frog and least Bell's vireo, in addition to providing wildlife movement corridors and habitat for a wide variety of plants and animals.

4.3.1.5 Special-status Species

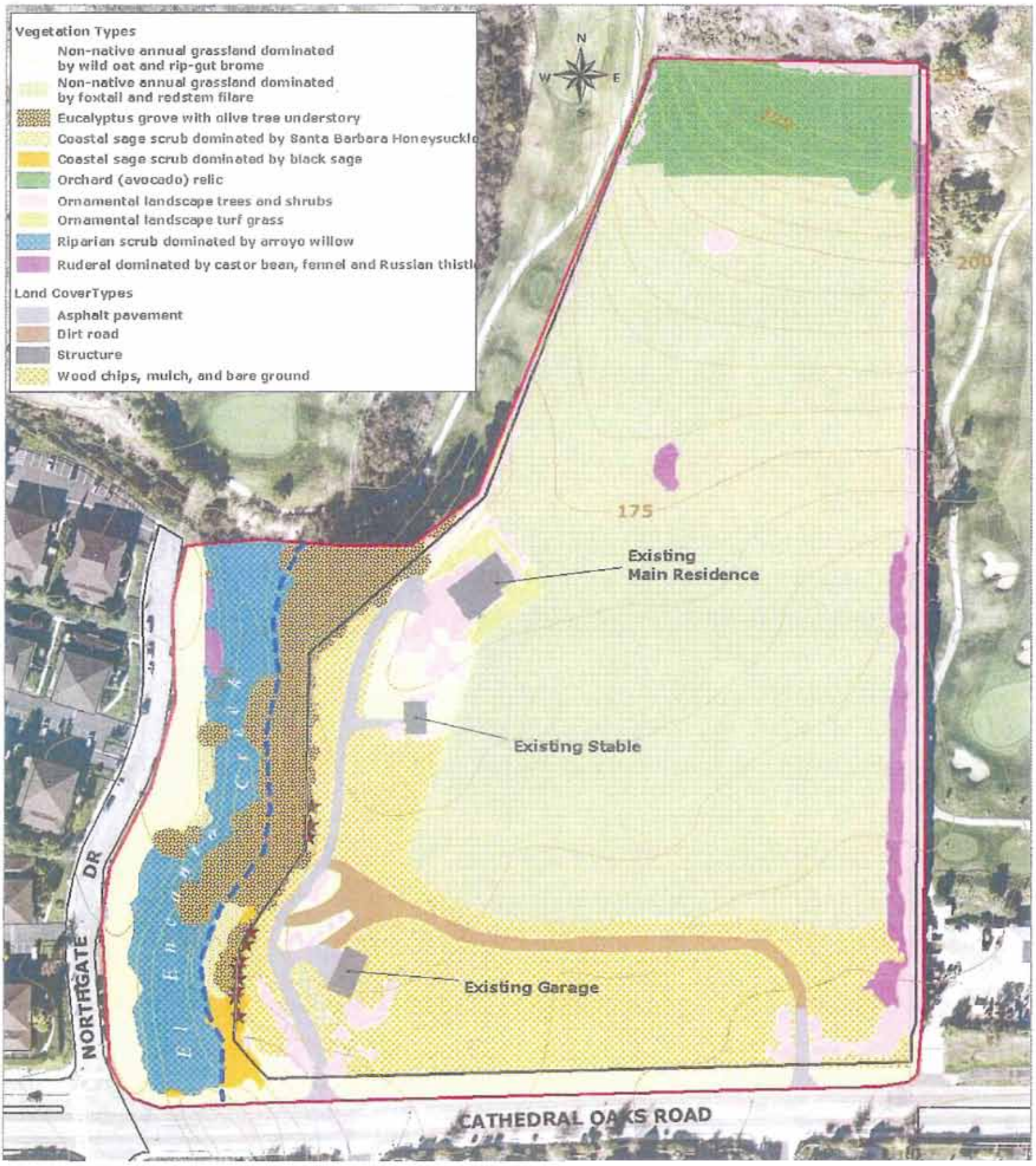
Special-status species are those protected by the federal Endangered Species Act or the California Endangered Species Act and those species meeting the CEQA definition of "rare."[1] For wildlife and plants, this includes all endangered or threatened species, candidates for listing, or Species of Special Concern listed by the federal and state governments. Additionally, for plants, these also include those listed by the California Native Plant Society (CNPS) as List 1 or List 2, as well as plants listed by the Santa Barbara Botanic Garden (SBBG) as locally sensitive.

There are several special-status wildlife (including federal- and/or state-listed species) and plant species that have the potential to occur in the riparian scrub vegetation and aquatic habitat that exist along El Encanto Creek adjacent to the project site. Though the species were not detected during site visits, the riparian area could provide suitable habitat for special-status species including bats, birds, reptiles, turtles, and amphibians.

Special-Status Plants

The Biological Report (Appendix C) addresses the following special-status plant species for the potential to occur in both the project site and larger study area: Santa Barbara morning-glory, southern tarplant, mesa horkelia, black-flowered figwort, Contra Costa goldfields, and Santa Barbara honeysuckle. Of these species, the Biological Report states that Santa Barbara honeysuckle was observed within the study area. Based on conditions present within the study area, mesa horkelia and southern tarplant do not have the potential to occur. Black-flowered figwort, a perennial herb associated with coastal sage scrub and chaparral, was not observed in the study area and is not expected to occur on the project site due to a lack of suitable habitat. Additionally, the Biological Report states that, due to a lack of suitable habitat, Contra Costa goldfields and Santa Barbara morning-glory are not expected to occur on the project site.

[1] CEQA Guidelines § 15380(a)(2) defines "rare" as "(A) although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or (B) the species is likely to become endangered within the foreseeable future throughout all of a significant portion of its range and may be considered 'threatened' as that term is used in the Federal Endangered Species Act."



K:\Irvine\GIS\Projects\Goleta\00114_13_Shelby\mapdoc\EIR\Fig04_2_1_Existing_Veg

Source: Watershed Environmental, Inc.

Figure 4.3-1
Existing Vegetation and Land Cover Types
Shelby Residential Project EIR

Contra Costa goldfields and Santa Barbara morning-glory are evaluated below for their potential to occur in the study area west of the project site.

Review of the California Natural Diversity Database (CNDDB) occurrence records, the City's *Special-Status Species and Environmentally Sensitive Habitat Map* (GP/CLUP Figure 4-1), and the *Special Status Species and Environmentally Sensitive Habitat Areas Map* (County of Santa Barbara 2009) indicated that Santa Barbara honeysuckle is the only special-status species recorded to be within the immediate vicinity of the project site. However, other special-status species of plants and wildlife are known to occur within a two-mile radius of the project site. These species and others that are known to include the project site within their geographic ranges are identified in Table 4.3-2.

TABLE 4.3-2
SPECIAL-STATUS SPECIES IN THE VICINITY OF THE PROJECT SITE

Common Name	Scientific Name	Status
Plants		
Contra Costa goldfields	*Lasthenia conjugens*	Federal: Endangered CNPS: CRPR 1B Local SBBG: Rare
Black-flowered figwort	*Scrophularia atrata*	CNPS: CRPR 1B
Mesa horkelia	*Horkelia cuneata* ssp. *puberula*	CNPS: CRPR 1B
Southern tarplant	*Centromadia parryi* ssp. *australis*	CNPS: CRPR 1B Local SBBG: Rare
Santa Barbara morning-glory	*Calystegia sepium* ssp. *binghamiae*	CNPS: CRPR 1B Local SBBG: Rare
Santa Barbara honeysuckle	*Lonicera subspicata* var. *subspicata*	CNPS: CRPR 1B Local SBBG: Rare
Wildlife		
California red-legged frog	*Rana aurora draytonii*	Federal: Endangered State: Species of Special Concern
Raptor nests (variety)	Various	Local: City of Goleta
Turkey vulture roosts	*Cathartes aura*	Local: City of Goleta
White-tailed kite roosts	*Elanus leucurus*	State: Fully Protected Local: City of Goleta
Western snowy plover	*Charadrius alexandrines nivosus*	Federal: Threatened State: Species of Special Concern
Willow flycatcher / Southwestern Willow Flycatcher	*Empidonax traillii* / *Empidonax traillii extimus*	Federal: Endangered (*E. t. extimus* only) State: Endangered (species including subspecies)
Least Bell's Vireo	*Vireo bellii pusillus*	Federal: Endangered State: Endangered
Yellow warbler	*Dendroica petechia brewsteri*	State: Species of Special Concern
Western pond turtle	*Emys marmorata*	State: Sensitive Species of Special Concern
Coast Range newt	*Taricha torosa torosa*	State: Species of Special Concern
Two-striped garter snake	*Thamnophis hammondii*	State: Species of Special Concern
Tidewater goby	*Eucyclogobius newberryi*	Federal: Endangered State: Species of Special Concern
Globose dune beetle	*Coelus globosus*	International Union for Conservation of Nature (IUCN): Vulnerable
Monarch butterfly	*Danaus plexippus*	Local: City of Goleta
Vernal pool fairy shrimp	*Branchinecta lynchi*	Federal: Threatened
Pallid bat	*Antrozous pallidus*	State: Species of Special Concern
Townsend's big-eared bat	*Corynorhinus townsendii*	State: Candidate
Western red bat	*Lasiurus blossevillii*	State: Species of Special Concern
Yuma myotis	*Myotis yumanensis*	State: Species of Special Concern

Contra Costa Goldfields

The Biological Report states that the last documented occurrence of Contra Costa goldfields in Santa Barbara County is from 1950 and that the plant occurs in mesic habitats including vernal pools, alkali playas, valley and foothill grasslands, and cismontane woodlands. The habitat within the study area and west of the project site is composed of a mixture of mesic riparian habitat and eucalyptus groves associated with El Encanto Creek, xeric coastal sage scrub, and xeric nonnative grasslands communities. Contra Costa goldfields would not be expected to occur within the xeric coastal sage scrub and grassland habitats. The riparian and eucalyptus communities are mesic in nature. However, these habitats do not provide suitable microclimate conditions, such as an open canopy, that would be needed for this plant to establish. As such, it was determined that Contra Costa goldfields does not have a potential to occur in the study area. No further analysis is needed for this plant.

Santa Barbara Morning-glory

The Biological Report states that Santa Barbara morning-glory is known to be associated with wetland and marsh habitats, was last observed in Devereux Slough in 1886, and is presumed to be extinct in California. In 2011, this plant was documented as occurring in the city of Chino, San Bernardino County. CNPS reports that Santa Barbara morning-glory is also found in alluvial riparian scrub, but that records from Santa Barbara indicate that it is presumed to be extirpated. This species of plant has always been rare. The plant biota of the coastal slope of Santa Barbara County has been well surveyed for decades. If the species were present, it would be known, particularly since the first documented occurrence for the species was in Santa Barbara County. Although the riparian habitat associated with El Encanto Creek may superficially appear to support potentially suitably habitat for Santa Barbara morning-glory, it is very unlikely that the species is present. In contrast to San Bernardino County, Santa Barbara County has been intensely searched for this species by botanists for years. If it were present, it would have been found over the past several decades. No further analysis is provided for this species, though it was determined that this species has a potential to occur within the study area.

Santa Barbara Honeysuckle

Santa Barbara honeysuckle is endemic to Santa Barbara County and is found in chaparral, oak woodland, and riparian habitats. Santa Barbara honeysuckle is designated by the CNPS as a California Rare Plant Rank (CRPR) 1B.2 plant species, meaning that it is considered rare, threatened, or endangered in California or extinct elsewhere, and that it is moderately threatened in California (approximately 20 to 80% of occurrences being threatened). In addition, SBBG has designated the plant as Rare. The CNDDB contains 21 occurrences of the plant within Santa Barbara County, the majority of which occur on the coastal slope of the Santa Ynez Mountains.

Eleven individuals of Santa Barbara honeysuckle were mapped as occurring along the southwestern border of the project site and west of the project site within El Encanto Creek (refer to Figure 4.3-1). These eleven plants identified on the project site are located along the southwestern border of the project site between the existing asphalt driveway and chain-link fence in the area proposed for construction of the detention basin. Several small patches were also located on the Glen Annie Golf Course to the west of the project site.

Special-Status Wildlife

Special-status wildlife species that were evaluated for the potential to occur in the study area included California red-legged frog, western snowy plover, Southwestern willow flycatcher, least Bell's vireo, yellow warbler, western pond turtle, coast range newt, two-striped garter snake, tidewater goby, globose dune beetle, monarch butterfly, and vernal pool fairy shrimp. In addition, the following wildlife use categories were evaluated for their potential to occur on the project site: raptor foraging and nesting, turkey vulture roosts, white-tailed kite roosts, and nesting birds.

The western snowy plover, tidewater goby, globose dune beetle, and vernal pool fairy shrimp are not expected to occur given lack of potential habitat within the study area (Biological Report, Appendix C). However, the following special-status wildlife species and wildlife use categories do have the potential to occur within the study area.

California Red-legged Frog

This species is listed as endangered by the federal government and as a Species of Special Concern by CDFW. Critical habitat has been designated for the species at the federal level and occurs within the study area vicinity, but does not occur in the study area or El Encanto Creek. The species is endemic to California and Baja, Mexico. Red-legged frogs can inhabit both aquatic habitats, for breeding, and upland habitats, for dispersal. Suitable breeding habitat for California red-legged frog includes long-standing ponds, slow moving streams, and streams with deep pools (USFWS 2010). The California red-legged frog uses riparian and upland habitats that are not dependent on surface water for foraging, shelter, cover, and non-dispersal purposes (USFWS 2010) and has been known to occupy upland habitats up to 328 feet from breeding habitat.

There is no potential for California red-legged frog to use the project site for breeding purposes due to a lack of suitable aquatic habitat, but they could use the project site as upland foraging and dispersal habitat, if they are present in the adjacent El Encanto Creek. The habitat associated with El Encanto Creek within the study area has the potential to support California red-legged frog in both a breeding and non-breeding capacity.

Willow Flycatcher/Southwestern Willow Flycatcher

Willow flycatcher (*Empidonax traillii*) is listed as endangered by the State of California and the subspecies southwestern willow flycatcher (*E. t. extimus*) is the only subspecies listed as endangered by the federal government. There are three subspecies that breed in California, but only southwestern willow flycatcher's breeding range includes the project area. The closest known breeding area of southwestern willow flycatcher to the project site is inland along the Santa Ynez River. Southwestern willow flycatchers breed in dense, mature riparian habitat along rivers, streams, and wetlands. Breeding habitats are almost always associated with standing water or saturated soils. The vegetation can be dominated by dense growths of willows or other shrubs and medium-sized trees. There may be an overstory of cottonwood, tamarisk, or other large trees. Although willow flycatchers are riparian specialists for breeding, they are migrants in spring and fall in a wide range of vegetation types, including landscaping in residential developments, sage scrub, and chaparral. They do not overwinter in California.

Southwestern willow flycatchers are uncommon migrants to the south coast of Santa Barbara County. There is low potential that the species would occur within the study area, including the

project site, during migration. There is less than reasonable potential for the species to breed/nest in El Encanto Creek. As a migrant, an individual may be present for a day or two, at most. No protection is given to the species' habitat use during migration.

Least Bell's Vireo

This species is listed as endangered by the State of California and the federal government, with critical habitat designated at the federal level. Its breeding distribution extends northwest to Santa Barbara County (rarely to Monterey County and formerly to the northern Sacramento Valley), northeast to Inyo County, south into northern Baja California, Mexico, and east into the edges of the deserts at a few points, such as the Mojave River (USFWS 1998). Nesting elevation ranges from below sea level to at least 4,100 feet. This species occurs in California from about mid-March through September.

Least Bell's vireos select dense vegetation low in riparian zones for nesting. Willows often dominate the canopy layer in the species' territories, with a dense, shrubby layer near the ground. Vireo nest sites are most frequently located in riparian stands between 5 and 10 years old. Even though mature trees are present at many of the sites, the average age of willow vegetation in the immediate vicinity of most nests was between 4 and 7 years. When mature riparian woodland is selected, vireos nest in areas with a substantial robust understory of willows as well as other plant species (Goldwasser 1981).

There is no potential for this species to occur on the project site due to lack of riparian vegetation, but there is the potential for least Bell's vireo to be present in El Encanto Creek within the study area. Based on CNDDB records, least Bell's vireo has not been detected within 2 miles of the project site but has been recorded in Santa Barbara County and the region. The structure of riparian vegetation in El Encanto Creek is suitable habitat for least Bell's vireo.

Western Pond Turtle

This species is designated by CDFW as a Species of Special Concern. It occurs within Pacific slope drainages from Washington to Baja, Mexico (CDFG 2000). The western pond turtle is known to inhabit slow-water aquatic habitat, with basking sites such as rocks, logs, and muddy banks, from sea level to 4,690 feet in elevation. The western pond turtle also uses adjacent upland habitats to reproduce, aestivate, and overwinter. In Southern California, the species is thought to be active year-round due to the warmer climatic conditions. The species is known to occur in uplands up to 1,596 feet from aquatic sites, but is usually found within 650 feet of aquatic habitat (CDFG 2000). Nesting sites are typically void of vegetative cover, receive ample warming from the sun, and are, on average, located on slopes below 25 degrees. Western pond turtles are a relatively long-lived species and become sexually mature between 7 and 11 years old (CDFG 2000). Although this species is not listed as endangered by the state or federal governments, western pond turtle populations have dramatically declined over the past several decades and, as such, receive priority attention by the resource agencies.

The project site does not contain any aquatic habitat. However, the riparian habitat within the study area associated with El Encanto Creek may provide suitable aquatic and upland habitat for the species.

Coast Range Newt

This species is designated by CDFW as a Species of Special Concern. It occurs within coastal drainages, from sea level to 6,002 feet in elevation, from Central Mendocino County in the North Coast Ranges south to San Diego County. Populations in Southern California appear to be highly fragmented (CDFG 2000). Coast range newts have an aquatic phase (for reproductive purposes) and a terrestrial phase. Aquatic habitat suitable for coast range newts consists of ponds, reservoirs, and slow-moving streams. Coast range newts appear to use a variety of terrestrial habitats including mesic forest, oak woodland, chaparral, and grassland habitat (CDFG 2000).

The project site does not contain any aquatic habitat. However, coast range newt may utilize the project site for dispersal and foraging during its terrestrial phase. Additionally, the habitat within the study area associated with El Encanto Creek may provide suitable aquatic as well as terrestrial habitat for the species.

Two-Striped Garter Snake

This species is designated by CDFW as a Species of Special Concern. It is highly aquatic and occurs within the South Coast and Peninsular Ranges and deserts from Monterey County south to Baja, Mexico (CDFG 2000). The species inhabits perennial and intermittent streams and rivers with dense streamside vegetation and sandy to rocky substrates. It is also known to occur within stock-ponds and similar aquatic habitats, if suitable riparian vegetation is present (CDFG 2000). Adult snakes were found to utilize varying habitats depending on the season. Snakes observed in the summer chiefly use aquatic and streamside habitats, while those in the winter were found to use coastal sage scrub and grasslands adjacent to aquatic and riparian habitat (CDFG 2000).

The project site does not contain any aquatic habitat. However, two-striped garter snakes may utilize the project site for dispersal and foraging. Additionally, the habitat within the study area associated with El Encanto Creek may provide suitable aquatic as well as terrestrial habitat for the species.

Bats

A number of California species of concern and non-listed species of bats have potential to occupy areas within the study area. Townsend's big-eared bat is a candidate for a special-status listing while the others—pallid bat, western red bat, and Yuma myotis bats—are California Species of Concern. All of these are likely to occur in the study area. Pallid bats and Townsend's big-eared bats are known to occupy rock crevices, caves, mines, and structures. The western red bat occupies grassland and woodland habitats. The Yuma myotis bat occupies areas with open woodlands associated with water. Other non-listed species that have potential to occur within the study area include big brown bat, Brazilian free-tailed bat, and California myotis. The big brown bat, California myotis, and pallid bat are summer breeders and are expected or have the highest potential to occur within the study area.

Areas within the project site (such as the stand of eucalyptus trees and the abandoned avocado orchard) and the riparian habitat at El Encanto Creek contain potential bat habitat (exfoliating bark, crevices, and foliage).

Monarch Butterflies

Monarch butterfly winter and autumnal aggregation sites are listed by CDFW as vulnerable to extirpation and are protected by the City of Goleta GP/CLUP Policy CE 4.0. The "western population" (western side of the Rocky Mountains) of monarchs overwinters in groves of eucalyptus trees and occasionally in groves of pine trees along the coastal central and southern portions of California between Santa Cruz and San Diego (Biological Report, Appendix C). Required elements for successful monarch butterfly aggregations include shelter from strong winds and storms, a microclimate with adequate sunlight, proximity to source of water or moisture, and a source of nectar for nourishment (GP/CLUP Conservation Element Policy CE 4.1).

There are approximately 20 existing and known historical monarch roost sites within the City of Goleta that have been designated as ESHAs. Protection of monarch butterfly ESHAs focuses on protecting the entire habitat structure (i.e., entire grove of trees), including surface hydrology that sustains the groves of trees. There are several monarch butterfly winter aggregation sites close to the study area (within 0.3 to 2.0 miles) (Biological Report, Appendix C).

Wildlife Use Categories

Raptor Nests and Foraging

A large variety of raptors, including American kestrel, Cooper's hawk, red-shouldered hawk, red-tailed hawk, turkey vulture, and white-tailed kite, are known to breed and nest along the south coast of Santa Barbara County. The Migratory Bird Treaty Act (16 USC §§ 703–711) and California Fish and Game Code §§ 3503, 3503.5, 3505, 3800, and 3801.6 protect active raptor nests. The Goleta General Plan (Section 4.0, Conservation Element) also outlines measures for protecting raptor nests, roosts, and foraging grounds.

The project site and portion of the study area associated with El Encanto Creek may be used by raptors for nesting and/or foraging. Potential nesting habitat is present in the study area, on the project site (a stand of eucalyptus trees and an abandoned avocado orchard), and in the riparian area in El Encanto Creek (large, mature arroyo willows and oaks). The riparian area in El Encanto Creek has a greater potential for nesting by raptors. Lastly, potential foraging habitat is present throughout the study area in the form of undeveloped land.

White-tailed Kite Roosts

This species is a fully protected species in the state of California, and roosting sites are protected by the City (GP/CLUP Conservation Element Policy CE 8.1). White-tailed kites occur in grasslands, orchards, open woodlands, marshes, and riparian regions near open grassland in California. This species is believed to be a non-migratory resident species through most of its breeding range with short-range movements, although during periods of low prey abundance the white-tailed kite will temporarily expand its range (ICF International and Dudek 2012).

White-tailed kites are common year-round in Santa Barbara County, with the greatest numbers of individuals and roost populations occurring along the South Coast of Santa Barbara County in the fall and winter. Communal roosts are typical in the fall and winter during the non-breeding season as pairs bond for the upcoming breeding season (February to August). This species prefers dense, broad-leafed deciduous trees for nesting and communal night roosting. Kites

typically roost in large groups within single isolated trees, trees within relatively large stands, and shrubs (ICF International and Dudek 2012).

There is potential (albeit low) for this species to communally roost in the riparian habitat in El Encanto Creek. However, it is unlikely for white-tailed kites to roost within the project site due to the limited amount of trees and shrubs and the lack of suitable structure. Based on the Biological Report and the City's General Plan, there is no evidence of white-tailed kite communal roosts within or adjacent to the study area. Most white-tailed kite roosts have been identified in the southwestern portion of the City. Based on the locations of the known communal roosts, the field visits made to the study area, and the adjacency of the study area to what is already a relatively developed landscape, it is unlikely that white-tailed kites would communally roost in El Encanto Creek.

Turkey Vulture Roosts

This species has no state or federal special status. However, per the City's GP/CLUP Conservation Element Policy CE 8.1, roosting sites are protected within the City's jurisdiction. Turkey vultures form communal roosts in the evening during the non-breeding season, typically in large trees, rock outcrops, and riparian thickets. These communal roosts vary in location from year to year and are part of a complex social structure. The number of individuals within the communal roost ranges in size from a few to several hundred birds (Appendix C).

There is potential (albeit low) for this species to communally roost in the riparian habitat in El Encanto Creek. However, it is unlikely for turkey vultures to roost within the project site due to the limited amount of trees and lack of suitable structure. Based on the Biological Report and the Goleta General Plan, there is no evidence of turkey vulture communal roosts within or adjacent to the study area. According to the Draft Ellwood-Devereux Coast Open Space and Habitat Management Plan (City of Goleta et al. 2004) and the City of Goleta's General Plan (2006), very few turkey vulture roosts have been identified in the City of Goleta: one in the southwestern portion of Goleta near Devereux Creek, one at Ellwood North, and one at Ellwood West on Ellwood Mesa. Based on the locations of the known communal roosts and the lack of presence observed during the field visits made to the study area, it is unlikely that the turkey vulture would communally roost in El Encanto Creek or on the project site.

4.3.1.6 Wildlife and Migration Corridors

Wildlife use of the project site is limited to a few relatively common species that are adapted to an urban-agricultural environment and can tolerate high levels of noise, night lighting, and human disturbance. Other species may migrate through during spring and fall or inhabit El Encanto Creek and may occasionally use the project site for foraging. Wildlife species observed during the January 2011 field surveys were common birds, reptiles, amphibians, and mammals; Table 4.3-3 contains a list of wildlife species observed on the project site during these field surveys.

TABLE 4.3-3
WILDLIFE OBSERVED IN THE PROJECT AREA

Common Name	Scientific Name	Seasonal Status
Pacific tree frog	*Pseudacris (=Hyla) regilla*	Resident Breeder
western fence lizard	*Sceloporus occidentalis*	Resident Breeder
American kestrel	*Falco sparverius*	Resident Breeder
Anna's hummingbird	*Calypte anna*	Resident Breeder
California towhee	*Pipilo crissalis*	Resident Breeder
Mourning dove	*Zenaida macroura*	Summer Breeder
red-tailed hawk	*Buteo jamaicensis*	Resident Breeder
turkey vulture	*Cathartes aura*	Visitor
western scrub-jay	*Aphelocoma californica*	Resident Breeder
white-crowned sparrow	*Zonotrichia leucophrys*	Winter Visitor
yellow-rumped warbler	*Dendroica coronata*	Winter Visitor
Botta's pocket gopher	*Thomomys bottae*	Resident Breeder
California ground squirrel	*Spermophilus beecheyi*	Resident Breeder

El Encanto Creek (directly adjacent to the project site) is expected to support wildlife movement in a north-south direction. This 630-foot-long creek corridor is adjacent to (south of) a wildlife corridor in the western portion of the Glen Annie Golf Course that was created to mitigate the impacts on El Encanto Creek that occurred from construction of the golf course. The functionality of El Encanto Creek to serve as a wildlife corridor for open space to the north and the Pacific Ocean to the south has been greatly constrained over time due to development south of the project site. South of Cathedral Oaks Road, the creek corridor becomes increasingly narrow and is channelized south of U.S. Highway 101. The use of the creek as a movement corridor for terrestrial wildlife south of Cathedral Oaks Road becomes increasingly constrained because it is surrounded by residential development and there is a 565-foot-long, below-ground culvert beneath U.S. Highway 101, Calle Real, and the Southern Pacific Railroad. Farther south, approximately 1,800 feet of the creek is channelized before it reaches the undeveloped open space area adjacent to Devereux Slough. El Encanto Creek has become a constrained linkage for wildlife populations north of the project site and those in Devereux Slough and elsewhere along the coast.

The project site is bounded on three sides by open space (golf course and riparian area). South of the project site is a busy roadway and residential development. Evidence of wildlife moving across the project site from the golf course to the north and east was not seen during the January 2011 field surveys but may occur occasionally. The project site does not provide topography that "funnels" wildlife onto the project site, such as a drainage, and thus is not expected to serve an important role in animal movement between the golf course and El Encanto Creek.

4.3.2 Regulatory Framework

4.3.2.1 Federal

Clean Water Act (CWA)

The primary goals of the CWA (33 United States Code [USC] §§ 1251–1376) are to restore and maintain the chemical, physical, and biological integrity of the nation's waters and to make all

surface waters fishable and swimmable. As such, the CWA forms the basic national framework for the management of water quality and the control of pollution discharges. The CWA provides the legal framework for several water quality regulations, including the National Pollutant Discharge Elimination System (NPDES), effluent limitations, water quality standards, pretreatment standards, anti-degradation policy, nonpoint-source discharge programs, and wetlands protection. The U.S. Environmental Protection Agency (EPA) has delegated the responsibility for administration of portions of the CWA to state and regional agencies. Therefore, the primary regulations resulting from the CWA are discussed below.

Endangered Species Act of 1973

The Endangered Species Act (16 USC § 1531 et seq.) and implementing regulations (50 CFR §§ 17.1, et seq.) include requirements for the protection and management of federally listed threatened or endangered plants and animals and their designated critical habitats. The Endangered Species Act provides the following definitions of threatened and endangered species:

- **Threatened species.** Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- **Endangered species.** Any plant or animal species that is in danger of extinction throughout all or a significant portion of its range.

Section 7 of the Endangered Species Act requires a permit to take threatened or endangered species during lawful project activities. The administering agency is the USFWS for terrestrial, avian, and most aquatic species.

Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 USC §§ 661–667e) provides authority for USFWS involvement in evaluating impacts on wildlife and fish that would result from proposed water resource development projects. Applicability depends on federal jurisdiction over some aspect of the project (e.g., dredge or fill activities in “waters of the U.S.”).

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 USC §§ 703–711) protects migratory birds by prohibiting private parties from intentionally taking, selling, or conducting other activities that would harm migratory birds, their eggs, or nests, unless authorized by a special permit. *Taking* is defined as “pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting.”

4.3.2.2 State

California Endangered Species Act (CESA)

The California Endangered Species Act (Fish and Game Code §§ 2050 through 2098) and implementing regulations (California Code of Regulations, Title 14, §§ 783 through 783.8 and §§ 786.0 through 786.8) include requirements for protecting and managing plant and animals species listed as endangered or threatened or designated as candidates for such listing. The CESA includes a consultation requirement “to ensure that any action authorized by a State lead agency is not likely to jeopardize the continued existence of any endangered or threatened species […] or result in the destruction or adverse modification of habitat essential to the

continued existence of the species" (Fish and Game Code § 2090). Plants of California declared to be endangered, threatened, or rare are listed at California Code of Regulations, Title 14, § 670.2. Animals of California declared to be endangered or threatened are listed at California Code of Regulations, Title 14, § 670.5. The CEQA Guidelines describe the types and extent of information required to evaluate the effects of a project on biological resources of a project site.

California Fish and Game Code §§ 3503, 3503.5, 3505, 3800, and 3801.6

These California Fish and Game Code sections protect all native birds, birds of prey, and all nongame birds, including eggs and nests, that are not already listed as fully protected and that occur naturally within the state.

4.3.2.3 Local

City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP)

The General Plan includes policies that protect and preserve biological resources within the City by designating specific resources and areas as protected, including ESHAs, restricting activities and uses in protected areas, providing for the management of the resources on City lands, specifying impact avoidance and mitigation requirements for types of activities and by type of biological resource, and providing guidance for development and conservation decisions over the long term. The policies anticipate the potential impacts on biological resources from the land uses and activities that will occur under the General Plan and serve to avoid, reduce, and/or mitigate those impacts. The key policies regarding biological resources are in the Conservation, Open Space, and Land Use Elements.

4.3.3 Project Impacts and Mitigation

4.3.3.1 Thresholds of Significance

Based on both the City's Initial Study Checklist (CEQA Guidelines, Appendix G; Environmental Checklist Form) and the City's *Environmental Thresholds and Guidelines Manual* (Thresholds Manual), a significant impact on biological resources could occur if the project would:

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

b. 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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

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

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

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

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

g. Conflict with adopted environmental plans and goals of the community where it is located.

h. Substantially affect a rare or endangered species of animal, plant, or the habitat of the species.

i. Interfere substantially with the movement of any resident or migratory fish or wildlife species.

j. Substantially diminish habitat for fish, wildlife, or plants.

Items a through f are from the Initial Study Checklist, and Items g through j are from the Thresholds Manual.

4.3.3.2 Project Impacts

The entire project site would be graded, commencing from the site boundary north of Cathedral Oaks Road. The project would make no changes to Cathedral Oaks Road. For the impacts analysis, the assumed construction activities include, without limitation, any activity associated with building the project until completion, including site preparation, equipment and material placement and storage on the project site, grading, installation of infrastructure, placement of landscaping, and home building. Once completed, ongoing activities over the project's lifetime would have impacts on biological resources including, without limitation, site maintenance activities (e.g., debris basin upkeep, bioswale upkeep), noise and lighting, weed and insect abatement, and the presence and encroachment of humans and pets in potential habitat. All landscaping would be contained within the project site boundaries.

For this analysis, direct impacts would be permanent and indirect impacts could be temporary or permanent, depending on the impact type. Analysis of potential direct, indirect, and cumulative effects are discussed for each phase (construction and operation) of the project. Direct impacts are those effects that can be expected from direct removal and disturbances to the land. Examples of direct impacts include mortality of individuals of protected species and permanent loss of habitat. Indirect impacts are those effects that give rise to delayed, secondary effects. Examples of indirect impacts include fragmentation, pollination interruption, increased environmental toxins, plant and wildlife dispersal interruption, increased risk of fire, and increased invasion of nonnative animals and plants that outcompete natives. These indirect impacts can increase mortality of individuals of native species, reduce their productivity, and/or reduce the functions and values of natural open space that serve as their habitat. Cumulative effects are those direct and indirect effects that the project could contribute to in conjunction with other planned past, present, and reasonably foreseeable projects.

Impact BIO-1. Special-status Plant/Animal Species

Special-status Plants

Ten vegetation types and four land cover types were identified at the project site. The majority of the vegetation species present are nonnative due to farming on the project site for a number of years. Most of the native plants that are in the study area are associated with the bed and banks of El Encanto Creek, located to the west of the project site on the Glen Annie Golf Course property.

Santa Barbara Honeysuckle

Eleven individuals of Santa Barbara honeysuckle were mapped as occurring along the southwestern border of the project site and west of the project site within El Encanto Creek (refer to Figure 4.3-1). The 11 plants identified on the project site are located along the southwestern border between the existing asphalt driveway and chain-link fence in the area proposed for construction of the detention basin. Grading activity conducted during the construction of the detention basin would potentially have a direct impact on these 11 individuals. In addition, the Santa Barbara honeysuckle plants observed west of the project site within El Encanto Creek would have the potential to be indirectly impacted by the project through increased recreational use of the creek area by the new residents and through the introduction of nonnative plants from the new development. Due to the designation of this plant species as rare, and given that the plant primarily occurs in coastal slope habitats that are also becoming increasingly rare, it was determined that impacts on these 11 individuals of Santa Barbara honeysuckle would be considered significant.

Special-status Wildlife

Special-status wildlife species evaluated for the potential to occur in the study area include California red-legged frog, western snowy plover, Southwestern willow flycatcher, least Bell's vireo, yellow warbler, western pond turtle, coast range newt, two-striped garter snake, tidewater goby, globose dune beetle, monarch butterfly, and vernal pool fairy shrimp. In addition, the following wildlife use categories were evaluated for their potential to occur on the project site: raptor foraging and nesting, turkey vulture roosts, white-tailed kite roosts, and nesting birds. The western snowy plover, tidewater goby, globose dune beetle, and vernal pool fairy shrimp are not expected to be present, given a lack of potential habitat within the study area (Biological Report, Appendix C). However, the special-status wildlife species and wildlife use categories discussed below have potential to occur within the study area.

State and Federally Listed Species

California Red-legged Frog

As noted above in Section 4.3.1, "Existing Setting," the habitat associated with El Encanto Creek within the study area has the potential to support California red-legged frogs in both a breeding and non-breeding capacity. If present in El Encanto Creek, California red-legged frogs could use the project site as upland foraging and dispersing habitat. Ground disturbances and construction activities have the potential to directly impact this species, causing injury and/or mortality of individuals. Additionally, there is the potential for indirect impacts to occur to this species within El Encanto Creek in the form of increased predation by cats and dogs, along with degradation of the riparian habitat due to increased night lighting and noise, increased potential

for human encroachment into the creek, proliferation of invasive plant species, and stormwater runoff from the development. As such, the project would significantly impact this species.

Willow Flycatcher/Southwestern Willow Flycatcher

As noted above in Section 4.3.1, "Existing Setting," southwestern willow flycatchers are uncommon migrants to the south coast of Santa Barbara County. There is low potential that the species would occur within the study area, including the project site, during migration. There is less than reasonable potential for the species to breed/nest in El Encanto Creek. No protection is given to the species' habitat use during migration. The removal of upland habitat within the project site would result in a less-than-significant impact on southwestern willow flycatcher. Because of the brief potential presence of a migrant willow flycatcher in El Encanto Creek during spring or fall in some years, the project would result in a less-than-significant impact on the species.

Least Bell's Vireo

Although the project would not directly impact potential habitat for the least Bell's vireo, there is potential for indirect impacts to occur from the project in the form of increased predation by cats and dogs, along with degradation of the riparian habitat due to night lighting, noise, increased potential for human encroachment into the Creek, proliferation of invasive plant species, and stormwater runoff from the development. During construction of the project, the increased dust could result in habitat degradation, and the increase in noise could cause increased depredation and nest abandonment. These potential permanent and temporary indirect effects would result in a significant impact on this species.

Non-Listed Species

Western Pond Turtle

The project site does not contain any suitable aquatic habitat for western pond turtle, but the riparian habitat within the study area associated with El Encanto Creek may provide suitable aquatic and upland habitat for the species. The ground disturbance and construction activities associated with the project have the potential to directly impact the species though injury and/or mortality, if individual turtles were overwintering or aestivating (being in torpor) on the project site. Additionally, there is the potential for indirect impacts to occur to the species within El Encanto Creek in the form of increased predation by cats and dogs, along with degradation of the habitat by increased night lighting and noise, increased potential for human encroachment into the creek, proliferation of invasive plant species, and stormwater runoff from the development. Therefore, the project has the potential to significantly impact western pond turtle, directly and indirectly.

Coast Range Newt and Two-Striped Garter Snake

Ground disturbance and construction activities have the potential to directly impact these two species and cause injury and/or mortality of individuals of these species. Additionally, there is the potential for indirect impacts to occur to the species within El Encanto Creek in the form of increased predation by cats and dogs, along with degradation of the riparian habitat due to increased night lighting and noise, increased potential for human encroachment into the creek, proliferation of invasive plant species, and stormwater runoff from the development. Although these species may be directly and indirectly impacted, both species as a whole are still common in their range. Potential impacts would be adverse but less than significant.

Bats

Areas within the project site (the stand of eucalyptus trees and the abandoned avocado orchard) and the riparian habitat at El Encanto Creek contain potential habitat for the Townsend's big-eared bat, pallid bat, western red bat, and Yuma myotis bats (exfoliating bark, crevices, and foliage). The removal of existing trees from the project site has the potential to directly impact these bat species by causing injury and/or mortality of individuals and/or maternity roosts. Additionally, there is the potential for indirect impacts to occur to these bat species within El Encanto Creek in the form of increased predation by cats and dogs, along with degradation of the riparian habitat due to increased night lighting and noise, increased potential for human encroachment into the creek, proliferation of invasive plant species, and stormwater runoff from the development. As such, the project would result in significant impacts on bats if they are present.

Wildlife Use Categories

Raptor Nests and Foraging

Construction-related activities associated with project noise and habitat removal would have the potential to directly and indirectly impact raptor nests, potentially leading to nest failure or abandonment and disrupting foraging activity within the project site and study area. Additionally, once project construction is completed, there would be the potential for indirect impacts from noise, human encroachment, domesticated animals, and invasive plant species. The removal of 15.8 acres of potential raptor foraging habitat would be a less-than-significant impact because vast expanses of suitable raptor foraging habitat are located in the general area surrounding the project site. The potential impact on active raptors nests would be a significant impact.

White-tailed Kite Roosts and Turkey Vulture Roosts

Based on the locations of other known communal roosts in the City, the field visits made to the study area, and the adjacency of the study area to what is already a relatively developed landscape, it is unlikely that white-tailed kites or turkey vultures communally roost in El Encanto Creek. The presence of the project would not dissuade these two species from roosting in the creek, as they would be able to utilize other areas of the creek along the Glen Annie Golf Course property and continuing northward. Therefore, the project would result in less-than-significant impacts on white-tailed kite communal roosts or turkey vulture roosts.

Riparian Wildlife Species

Construction and operation of the project would have the potential to impact special-status species that may be present in the riparian ESHA. Special-status wildlife species are not known to occur at the project site, but several special-status species (including, without limitation, western pond turtle or California red-legged frog) have the potential to occur in the riparian vegetation and aquatic habitat that exist along EI Encanto Creek adjacent to the project site. If these special-status species occur within the riparian area, significant impacts could result due to the encroachment of the project to within 100 feet of the edge of riparian habitat. This would be a potentially significant impact.

Nesting Birds

Habitat suitable to nesting birds is present in the riparian area and elsewhere on the project site; therefore, disturbance of such habitat caused by construction of the project could result in a

significant impact on nesting birds. If conducted during the bird nesting season, construction-related grading and vegetation removal would have the potential to result in damage to or loss of shrubs that could contain active bird nests for species such as the least Bell's vireo or common native birds protected by the MBTA and the California Fish and Game Code. Construction activities would also have the potential to disturb nesting birds within the vicinity of the project site. If nesting birds, such as the least Bell's vireo, are present, the indirect impacts of the project could be significant. Any project activities that result in the loss of bird nests, eggs, and young would be in violation of one or more of Fish and Game Code §§ 3503 (any bird nest), 3503.5 (birds-of-prey), or 3511 (Fully Protected birds). In addition, removal or destruction of one or more active nests of any birds protected by the MBTA, whether nest damage was due to tree removal or to other construction activities, would be considered a violation of the MBTA and Fish and Game Code § 3503. Such violations would be considered a significant impact.

Impact BIO-2. Riparian/Other Sensitive Natural Communities

No riparian vegetation occurs on the project site that would be removed by the project. There is coastal sage scrub dominated by Santa Barbara morning-glory (0.08 acre), which is located within the study area to the west of the project site, adjacent to El Encanto Creek. Coastal sage scrub dominated by black sage (*Salvia mellifera*) is present within the study area (0.09 acre), with a small amount (approximately 0.03 acre) proposed for removal by the project. The removal of roughly 0.03 acre of sage scrub would not be a significant impact. However, the potential for the project to indirectly impact the riparian vegetation in El Encanto Creek during construction and over the lifetime of the project (e.g., through reduced water quality and reduced quality of habitat for wildlife) is a potentially significant impact.

Impact BIO-3. Wetlands

There are no wetland resources on the project site. Therefore, there would be no direct impacts on wetlands. The project could indirectly impact wetlands in El Encanto Creek (if present) during construction and/or the lifetime of the project through water quality degradation. This indirect impact is considered significant.

Impact BIO-4. Wildlife Movement

As discussed above in Section 4.3.1.6, the project site is not expected to support wildlife movement. El Encanto Creek is expected to support limited wildlife movement given the developed landscape south of the study area. Although the project would not directly encroach into the creek, there is potential for short-term (during construction) and long-term (life of the project) indirect impacts to occur to the creek that would further degrade its ability to support animal movement. Project construction would occur close to the wildlife movement corridor and could potentially temporarily disrupt wildlife movement in and through the corridor. Night lighting and noise from the project's operation would also reduce wildlife movement. Therefore, the degradation of El Encanto Creek's ability to support animal movement would be a significant impact.

Impact BIO-5. Conflicts with Policies

The following policies are applicable to the proposed project and its immediate surroundings.

Environmentally Sensitive Habitat Areas

Goleta GP/CLUP Subpolicy CE 1.2 identifies El Encanto Creek as an ESHA (creek and riparian habitat). Subpolicy CE 1.6 requires protection of ESHAs against significant disruption of habitat values. An SPA has been established for El Encanto Creek to provide protection of the creek and its associated riparian habitat; see discussion of the SPA policies below.

Streamside Protection Areas

Goleta GP/CLUP Subpolicy CE 2.2 regarding SPAs requires a 100-foot buffer along both sides of El Encanto Creek. This buffer is intended to preserve the SPA in a natural state in order to protect the associated riparian habitats and ecosystems. Under certain circumstances, Subpolicy CE 2.2 allows for the reduction of the 100-foot SPA as long as a 25-foot minimum is maintained. Although the creek and its riparian corridor are located outside the project site, the 100-foot SPA buffer does extend into the western portion of the project site.

Construction and operation of the project would result in an encroachment into the SPA buffer. The proposed detention/retention basin, vegetated bioswale, children's tot lot, walking path, small portions of two residential lots, and a portion of the internal road system would occur within the 100-foot SPA buffer. The two residential lots and the internal road system would be at least 50 feet from El Encanto Creek, which exceeds the 25-foot minimum buffer required by Subpolicy CE 2.2. The detention/retention basin, vegetated bioswale, walking path, and the children's tot lot would be located within the 25-foot minimum buffer. Though an encroachment into the buffer zone could have the potential to cause significant impacts, the detention basin, vegetated bioswale, walking path, and children's tot lot could be considered compatible land uses and activities allowed in SPAs, per GP/CLUP Subpolicy CE 2.3, *Allowable Uses and Activities in SPAs*. Subpolicy CE 2.3e allows for the construction and maintenance of foot trails, bicycle paths, and similar low-impact facilities for public access. Subpolicy CE 2.3f allows for resource restoration and enhancement projects. The detention basin and vegetated bioswale would capture stormwater for filtration, infiltration, and sediment dropout. The walking path would further protect water quality by allowing surface runoff to filter through its permeable surface. Because the uses proposed within the 100-foot and 25-foot buffers would be consistent with Subpolicy CE 2.2, the project's impacts would be less than significant.

Monarch Butterfly Habitat Areas

Goleta GP/CLUP Policy CE 4 designates and protects monarch butterfly habitat areas as ESHAs. Overwintering sites must have the following microclimatic conditions: absence of freezing temperatures, shelter from strong winds, sources of moisture for hydration, cool grove temperatures, exposure to filtered sunlight, protection from prevailing winds from the north and northwest, and winter storm winds from the south (Leong et al. 2004). The eucalyptus stand on the project site consists of five large trees that exist in a row with a canopy of approximately 0.97 acres. The linear arrangement of eucalyptus trees does not provide shelter from strong winds, protection from prevailing winds, cool grove temperatures, or exposure to filtered sunlight area, which are needed to support a monarch butterfly aggregation site. Given the lack of suitable habitat for monarch butterflies within the study area and within the directly adjacent areas, the project is not expected to significantly impact monarch butterfly aggregation sites.

Protection of Special-status Species

Goleta GP/CLUP Subpolicy CE 8.1 requires protection and preservation of requisite habitats for special-status plants and animals. Although the GP/CLUP does not designate the project site as a sensitive-species ESHA, Subpolicy CE 8.3 extends protection to areas not designated in the GP/CLUP but meeting the ESHA criteria.

As discussed above in Impact BIO-1, the project site is known to contain Santa Barbara honeysuckle, and El Encanto Creek has potential habitat for California red-legged frog, western pond turtle, least Bell's vireo, and nesting or roosting raptors. If adverse impacts on these species and their habitats resulted from the project, the project would not be consistent with GP/CLUP Subpolicy CE 8.1, which would be a significant impact.

Habitat Conservation Plans, Natural Community Conservation Plans, or other Conservation Plans

The project does not occur within or conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.3.4 Cumulative Impacts

This project and related projects in the Goleta area could potentially result in cumulative impacts on water quality of the Devereux Slough, with potential secondary cumulative impacts on biological resources in the slough. As described above, construction and operation of the proposed project would remove existing vegetation on site and increase the amount of impervious surfaces, which would increase the quantity of, and potentially diminish the quality of, stormwater runoff reaching El Encanto Creek and, eventually, the Devereux Slough. A similar residential development project, the Kenwood Village project, is also proposed to be constructed along El Encanto Creek. Before mitigation, these projects would result in a potentially significant contribution to cumulative water quality degradation of the Devereux Slough, affecting the aquatic habitat and the species dependent upon it. After implementation of required mitigation measures, the projects' contribution to these cumulative water quality impacts would be less than significant.

Additionally, construction and operation activities that infringe upon the SPA could cumulatively diminish the biological functionality of the riparian habitat along El Encanto Creek. Although the project would maintain the minimum 25-foot SPA buffer as required by GP/CLUP Subpolicy CE 2.2, the project has the potential to cause cumulative impacts on species that could inhabit El Encanto Creek including, without limitation, Santa Barbara honeysuckle, California red-legged frog, least Bell's vireo, and western pond turtle.

4.3.5 Mitigation Measures

Mitigation Measures AES-3a, HYD-1a, HYD-1b, HYD-2a, and HYD-2b would be implemented for Impact BIO-2 and related cumulative impacts. In addition, the measures below are necessary to provide additional protection to El Encanto Creek and its biological resources.

MM BIO-1a/BIO-3a. General Biological Resource Protection during Construction

Before commencement of grading activities, the entire limits of disturbance must be demarcated with ESHA fencing, which must be maintained throughout the period of construction. This will ensure that biological resources adjacent to the project are not disturbed. A qualified biologist (with selection to be reviewed and approved by the City) must be present during the installation of the ESHA fencing.

Construction personnel must strictly confine their activities, vehicles, equipment, and construction materials to the limits of disturbance. The project biologist must monitor construction activities for the duration of the project's construction phase to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint. Special attention must be provided to ensure that the ESHA fencing is maintained daily. Monitoring must occur for the duration of the construction activity to ensure implementation of best management practices (BMPs).

Active construction areas must be watered regularly to control dust and thus minimize impacts on adjacent lands and waters.

Firefighting equipment (e.g., extinguishers, shovels, water tankers) must be available on the site during all phases of project construction to help minimize the chance of human-caused wildfires. Shields, protective mats, and/or other fire-preventative methods must be used during grinding, welding, and other spark-inducing activities. Personnel trained in fire hazards, preventative actions, and responses to fires must advise contractors regarding fire risk from all construction-related activities.

Waste, dirt, rubble, or trash must be contained and removed from the project area.

Plan Requirements and Timing: Before the City issues any grading or building permits, all construction documents must include the requirements listed above related to ESHA fencing, limits of construction, requirements for biological monitors, BMPs, site watering, training, fire prevention and control, and removal of waste. Before commencement of grading activities, the project biologist must conduct a pre-construction workshop to instruct construction personnel to restrict disturbance to areas outside those demarcated by the ESHA fencing.

Monitoring: Monitoring must be conducted by the Planning and Environmental Review Director, or designee, to ensure that the measures listed above are taken to protect biological resources.

MM BIO-1b. Protect Special-status Plant Species

Santa Barbara honeysuckle plants are present on the project site and may be within the construction zone; this species can be detected throughout the year. Before commencement of grading activities, a qualified biologist (with selection to be reviewed and approved by the City) must identify all existing Santa Barbara honeysuckle plants on the project site. A 25-foot buffer using ESHA fencing must be installed by the construction crew as directed by the project biologist. No construction must be allowed within the 25-foot buffer. If necessary, construction plans must be modified to avoid the 25-foot buffer.

If the 25-foot buffer cannot be maintained and avoidance of the Santa Barbara honeysuckle plants is not feasible, the following conditions will apply:

- Before construction, translocation of the individuals by a qualified biologist to lands that are legally protected and managed by a verified land management entity must be required, with monitoring of the transplantings by a qualified biologist for no less than 3 years to ensure translocation success; and/or
- Before construction, collection of seeds by a qualified biologist at the appropriate time of year (approximately July to August) for propagation and/or permanent collection at a recognized native plant horticultural site must be required, with the propagated seeds planted on lands that are legally protected and managed by a verified land management entity and monitoring for no less than 3 years to ensure success; and/or
- Before construction, collection of seeds and distribution to a suitable legally protected site as directed by a qualified botanist must be required, with monitoring for no less than 3 years to ensure success.

Plan Requirements and Timing: Before the City issues any grading or building permits, the permittee must submit to the Planning and Environmental Review Director, or designee, for approval a Santa Barbara honeysuckle mitigation plan (SBHMP) that incorporates the requirements noted above for ESHA fencing, ongoing on-site protection, translocation, propagation, and/or plantings. The SBHMP must be developed by a qualified biologist (with selection to be reviewed and approved by the City).

Before the City issues any grading or building permits, all plans for grading and construction must be revised, as necessary, to reflect all necessary measures for implementation of the SBHMP.

Before the City issues any certificate of occupancy, the permittee must complete all activities for establishment of on-site protection or off-site mitigation under the SBHMP.

Three years after implementation of activities for such establishment, the permittee must submit a final mitigation report to the Planning and Environmental Review Director, or designee, and relevant Regulatory Agencies. The mitigation report must discuss at a minimum the implementation, monitoring, and management of the mitigation project over the 3-year period, and indicate whether the project has been successful based on established success criteria.

Monitoring: The Planning and Environmental Review Director, or designee, must conduct on-site monitoring to ensure implementation of the SBHMP. The Planning and Environmental Review Director, or designee, must also verify implementation and success of any activities for off-site mitigation conducted pursuant to the SBHMP.

MM BIO-1c. General Protection of Special-status Animals

To avoid attracting predators, during construction the project site must be kept as clean of debris as possible. All construction debris must be regularly removed from the site. In addition, all food-related trash (e.g., chips and sandwich bags; discarded cups, cans, and bottles; orange and banana peels; fast food packaging; used napkins; utensils) must be enclosed in sealed containers and removed from the site daily. Any permanent trash receptacles located in the common areas of the project site must be covered and wildlife-proof.

Plan Requirements and Timing: Before the City issues any grading or building permits, the permittee must submit a Construction Waste Reduction and Recycling Plan (WRRP) for review and approval by the Public Works Director, or designee. The Construction WRRP must

implement the requirements above and identify locations and design specifications of trash receptacles. Before the City issues any certificate of occupancy, the Conditions, Covenants, and Restrictions (CC&Rs) for the project must include requirements for food-related trash handling noted above.

Monitoring: The Public Works Director, or designee, must review and approve the Construction WRRP before the City issues any grading or building permits. The Planning and Environmental Review Director, or designee, must approve the CC&Rs, in a form approved by the City Attorney, to ensure that the requirements for trash handling are included before the City issues any certificate of occupancy.

MM BIO-1d. Protect Special-status Reptiles and Amphibians

To avoid impacts to the California red-legged frog, a focused survey following current USFWS survey protocol must be performed during both the breeding and nonbreeding seasons. If the species is not found, no further action is needed. If the species is found, consultation with USFWS will be required to coordinate and adopt short-term (i.e., during construction) and long-term (i.e., post-construction) project-specific avoidance and minimization measures and to negotiate the terms of compensatory mitigation. Compensatory mitigation would need to occur at a minimum 3:1 ratio for habitat degradation and number of individuals, off-site and on lands that are legally protected in perpetuity and managed by an entity with expertise with California red-legged frog.

To avoid impacts to the western pond turtle, a survey to determine the presence or absence of western pond turtle must be performed using current CDFW protocol. The survey must occur during May through July. If the survey results confirm the species is absent, no further action is needed. If the species is found, potential loss of individual animals must be mitigated through translocation to suitable off-site habitat, in coordination with and as approved by the City and CDFW.

Monitoring of the translocated population must occur for at least 3 years. Success would be measured as establishment at the new site of at least the number of individuals translocated. If success has not been reached by 3 years, additional measures must be implemented until, at a minimum, the number of individual animals translocated have established at the new site. The lands where the translocation would occur would need to be legally protected and managed by a verified entity having specialization with western pond turtles.

Not more than seven days before construction and once the ESHA fencing has been installed, a qualified biologist (with selection to be reviewed and approved by the City) familiar with the special-status herpetofauna potentially present must perform a site check for special-status reptiles/amphibians. Any individuals found must be moved outside of the ESHA fencing. This will require the biologist to have a CDFW Scientific Collection Permit and authorization by CDFW to perform the relocation of individuals. The site check for special-status reptiles and amphibians would occur once the actions described above for California red-legged frog and western pond turtle have been executed.

Plan Requirements and Timing: Grading plans must specify the requirement for biological surveys before the beginning of site preparation or construction activities. All plans must be revised, as necessary, to reflect the necessary measures to be taken to ensure the protection of any identified special-status wildlife species. The project biologist must conduct the biological survey before commencement of any site preparation or construction activities.

Monitoring: The Planning and Environmental Review Director, or designee, must review any survey results and/or biological reports before commencement of any site preparation or construction activities in consultation with appropriate resource agencies (USFWS and/or CDFW). The Planning and Environmental Review Director, or designee, must also conduct monitoring throughout the construction period to ensure implementation of the measures for protection of the special-status species that are agreed upon by the appropriate Regulatory Agencies and permittee, as necessary.

MM BIO-1e. Protect Special-status Birds

To avoid impacts to the least Bell's vireo, a focused survey following current USFWS guidelines must be performed by a qualified biologist between April 10 and July 31. If this survey finds the species absent, no further action is needed. If the species is present, coordination with USFWS will be required. Compensatory mitigation must occur at no less than a 3:1 ratio for habitat degradation and number of individuals indirectly impacted. Compensatory mitigation can occur by purchasing off-site credits or by acquiring lands that are placed in a conservation easement and managed by an entity having demonstrated expertise with riparian habitat and least Bell's vireo.

Plan Requirements and Timing: Grading plans must include the requirement for a biological survey before the beginning of site preparation or construction activities. All plans must be revised, as necessary, to reflect the necessary measures to be taken to ensure the protection of any identified special-status wildlife species. A qualified biologist (with selection to be reviewed and approved by the City) must conduct the biological survey before site preparation or construction activities.

Monitoring: The Planning and Environmental Review Director, or designee, must review any survey results and/or biological reports, before site preparation or construction activities, in consultation with appropriate resource agencies (USFWS and/or CDFW). If the results of the survey confirm the presence of special-status wildlife species, consultation with the appropriate resource agency must be initiated. Monitoring must be conducted by the Planning and Environmental Review Director, or designee, to ensure that the measures agreed upon by the appropriate resource agency and applicant are taken to protect the special-status species. The Planning and Environmental Review Director, or designee, must also conduct monitoring throughout the construction period to ensure proper implementation of the measures agreed upon by the resource agency and applicant, as necessary.

MM BIO-1f. Protect Bat Species

To avoid impacts to bats, a qualified biologist (with selection to be reviewed and approved by the City) with specialization in bats must perform a careful review of the trees on the project site for bat roost potential. If the biologist determines there is no potential for bats to roost on site, no further action is needed. If there is potential for bat roosting on the project site, the biologist must perform a one-night bat emergence survey (bats normally emerge during a 15 to 20-minute period after sunset). The bat emergence survey must be performed during acceptable weather conditions (without rain or high winds and with temperatures above 45 degrees Fahrenheit). If bats are not detected, no further action is needed. If bats are detected, the following approach must be taken unless directed otherwise by CDFW.

If trees with bat roost potential require removal during winter months when bats are in torpor (October 31 to February 15, but also during similar conditions at other times of the year), the

biologist must physically examine the potential roost habitat for presence or absence of bats (such as by lift equipment or fiber optic scope) before the start of construction. If the roost is determined to be occupied during this time, the tree must be avoided until after the winter season, when bats are once again active. Avoidance must include placement of ESHA fencing around the tree with a 25-foot buffer.

Trees with potential colonial bat habitat (defined as trees with cavities, crevices, exfoliating bark, and bark fissures) can be removed outside of the maternity season (April 15 to August 15) and winter season (October 31 to February 15) using a two-step tree-trimming process that occurs over two consecutive days. On Day 1, under the supervision of the biologist, Step 1 would involve removal by handheld equipment (e.g., using chainsaws) of branches and limbs with no cavities. This will create a disturbance (noise and vibration) and physically alter the tree. Bats roosting in the tree will either abandon the roost immediately (rarely) or, after emergence, will avoid returning to the roost. On Day 2, Step 2 of the tree removal would occur, which would involve removal of the remainder of the tree. Trees that are only to be trimmed and not removed would be processed in the same manner; if a branch with a potential roost must be removed, all surrounding branches would be trimmed on Day 1 under supervision of the biologist, and then the limb with the potential roost would be removed on Day 2.

Trees with foliage (and without colonial bat roost potential) that can support lasiurine bats, such as the solitary western red bat and western yellow bat (the only special-status lasiurine species with the potential to occur in the project area), must have a two-step tree-trimming process that occurs over one day under the supervision of the biologist. Step 1 would be to remove adjacent, smaller, or non-habitat trees to create noise and vibration disturbance that would cause abandonment. Step 2 would be to remove the remainder of tree on that same day.

Plan Requirements and Timing: Grading plans must specify the requirement for biological surveys before the beginning of site preparation or construction activities. All plans must be revised, as necessary, to reflect the necessary measures to be taken to ensure the protection of any identified potential bat roosts.

Monitoring: The Planning and Environmental Review Director, or designee, must review any survey results and/or biological reports before site preparation or construction activities. If the results of the survey confirm the presence of potential bat roosts, subsequent surveys and tree removal procedures must be monitored by the Planning and Environmental Review Director, or designee, to ensure that the measures are taken to protect bats.

MM BIO-1g. Protect Nesting Birds (including Raptors)

Not more than seven days before the commencement of construction activities (if between January 15 and September 1), a qualified biologist (with selection to be reviewed and approved by the City) must perform a nesting bird survey (including raptors) that must consist of at least two visits to determine whether there are active nests within the project site and within 200 feet of the project footprint. This survey must also identify the species and, to the degree feasible, nesting stage (e.g., incubation of young, feeding of young, near fledging). Nest locations must be mapped with handheld GPS units or an alternative method that allows the nest to be mapped and refound. If breeding activities and/or an active bird nest is located, a nest avoidance zone will be established and no construction activities will be permitted within the established zone. The nest avoidance zone will be established by fencing and/or flagging a minimum of 100 feet for passerines (300 feet for raptors) in all directions from the breeding habitat/nest site unless a reduced buffer is approved by CDFW. This area must not be disturbed until, as determined by

the biologist, the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young will no longer be impacted by the project.

Plan Requirements and Timing: Grading plans must specify the requirement for a field survey to be conducted and submitted to the Planning and Environmental Review Director, or designee, for review before the beginning of site preparation or construction activities. The project biologist must conduct the field survey before commencement of any grading and/or construction activities.

Monitoring: The Planning and Environmental Review Director, or designee, must review any survey results and/or biological reports before site preparation or construction activities, in consultation with appropriate resource agencies (USFWS and/or CDFW), as needed. If necessary, the Planning and Environmental Review Director, or designee, must conduct monitoring throughout the construction period to ensure implementation of protective measures agreed upon by the applicant, the City of Goleta, and the appropriate resource agency.

MM BIO-2a/BIO-3b/BIO-4a. Protect Riparian Habitat, Wetlands, and Wildlife Movement

The proposed storm drain at the top of the bank of El Encanto Creek must be designed to avoid any riparian vegetation connected with El Encanto Creek and must be located outside of any federal and state jurisdictional waters.

ESHA fencing must be installed along El Encanto Creek as directed by a qualified biologist (with selection to be reviewed and approved by the City) who specializes in jurisdictional delineations to ensure that no encroachment into the riparian area occurs during installation of the storm drain. This ESHA fence placement can occur at the same time as the other ESHA fencing placement, but must be maintained throughout construction.

In addition to the measures presented above for special-status species, the riparian habitat must be permanently protected from encroachment by a solid perimeter wall along the western and northern boundaries of the development such that noise, lighting, pets, and human presence are blocked from El Encanto Creek to the maximum extent practicable. This includes the area of the detention basin. The wall must be no less than 5 feet high and maintained by the homeowners association for the development to ensure its intended function.

Signs must be posted on the wall in community areas indicating that trespassing into El Encanto Creek is prohibited and that El Encanto Creek has sensitive biological resources.

Plan Requirements and Timing: Grading plans must specify the requirement for ESHA fencing along the storm drain area to protect the riparian habitat and be submitted to the Planning and Environmental Review Director, or designee, for approval before the beginning of site preparation or construction activities. Project plans must be revised as necessary to show an acceptable location for the storm drain and the required solid wall and signage and submitted to the Planning and Environmental Review Director, or designee, for approval before the City issues any grading or building permits.

Monitoring: Monitoring must be conducted by the Planning and Environmental Review Director, or designee, to ensure that the measures listed above are taken to protect riparian habitats.

4.3.6 Residual Impacts

After mitigation, the impacts on biological resources would be reduced to less-than-significant levels, including impacts on Santa Barbara honeysuckle, California red-legged frog, western pond turtle, least Bell's vireo, other riparian wildlife species, nesting birds, riparian/other sensitive natural communities, wetlands, and wildlife movement.