

## 4.3 BIOLOGICAL RESOURCES

This section identifies biological resources present on the project site and assesses the project's impacts upon those resources. It is based on previous biological resource assessments for the site (conducted for the applicant) and a review of those assessments and supplemental field surveys and research conducted by the City's EIR consultant.

Since the Notice of Preparation was published March 9, 2010, the applicant has undertaken minimal amount of site disturbance activity for environmental research and maintenance. These activities involved conducting cultural resources investigations in March 2011, fuel maintenance as required by the County Fire Department in May 2011, and geotechnical exploration of the project site to assess possible construction design (i.e. foundation designs) on June 13-15, 2011. Each of these activities was planned and monitored to avoid any significant biological resources. Fuel modification is conducted on an ongoing basis once every three months.

### 4.3.1 Existing Conditions

This section discusses the regional setting, project site conditions, and the existing and potentially occurring biological resources at the project site. Biological resources within the surrounding area are also discussed, when relevant.

### Methodology

The description of existing conditions provided below is based on a literature review and site surveys.

#### *Literature Review*

The literature review included previous site-specific and non site-specific studies and California Department of Fish and Game (CDFG) publications and databases, as follows:

- *Biogeographic Information and Observation System (BIOS)*, California Department of Fish and Game, data as of January 2011;
- *List of Special Vascular Plants, Bryophytes, and Lichens*, California Department of Fish and Game, January 2011;
- *Special Animals*, California Department of Fish and Game, January 2011;
- *List of Vegetation Alliances and Associations (Natural Communities List)*, California Department of Fish and Game Vegetation Classification and Mapping Program, September, 2010;
- *California Natural Diversity Database (CNDDDB) Rarefind 3 Element Occurrence Report for Dos Pueblos Canyon, Goleta, and Santa Barbara Quadrangles*, California Department of Fish and Game, data as of July 2010;
- *City of Goleta General Plan/Coastal Land Use Plan Conservation Element*, City of Goleta, Adopted October 2, 2006 and Amended November 17, 2009;
- *Hollister and South Glen Annie Arborist Report, Project APN: 073-030-020*, Tree Concern, October 1, 2009;
- *Focused Southern Tarplant Survey at the Westar Hollister Avenue Property*, Dudek and Associates, Inc., Santa Barbara, CA, July 11, 2011;

- *Wetland Delineation of the Westar Hollister Avenue Property*, Dudek and Associates, Inc., Santa Barbara, CA, May 19, 2011; and,
- *Westar Hollister Avenue Property Biological Resources Constraints Survey*, Dudek and Associates, Inc., Santa Barbara, CA, revised June 23, 2005.

### **Biological Surveys**

Dudek biologist Ms. Katherine Rindlaub conducted biological investigations of the project site and vicinity on April 2 and April 13, 2005, which included an assessment of the condition and quality of habitats present, vegetation mapping, and identification of plant and wildlife species at the site. Site surveys also involved a search for wetlands and rare, threatened, and endangered species.

Envicom Corporation Principal Biologist, Mr. Carl Wishner, and Staff Biologist, Mr. James Anderson, conducted a vascular plant survey; incidental wildlife observations; vegetation mapping; and a search for rare, threatened, and endangered species, sensitive natural communities, and potential jurisdictional resources on December 10, 2010. Mr. Anderson also conducted a biological survey of the site on April 11, 2011. Surveys were conducted on foot and covered the project site. Wildlife species were identified by direct observation, vocalization, or by sign (e.g., tracks, scat, burrows).

Dudek biologist John Davies IV conducted field surveys on May 6, 2011, and Dudek biologists John Davies IV and Dave Compton conducted field surveys on May 12, 2011, for purposes of delineating potential wetlands. The surveys were conducted in accordance with the procedures of the Army Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987), Department of the Army Clarification and Interpretation of the 1987 USACE Wetland Delineation Manual (DOA 1992): and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008). A total of eight sampling points were selected, and each sampling location was mapped and analyzed for hydrophytic vegetation, hydric soil, and wetland hydrology.

Dudek botanist Britney Strittmater and biologist Traci Caddy conducted field surveys on June 10, 2011, and Dudek biologists John Davies IV and Dave Compton conducted field surveys on June 30, 2011, for purposes of focused southern tarplant surveys. The surveys were conducted based on the methodology recommended by United States Fish and Wildlife Service (USFWS) and CDFG guidelines (USFWS 2000; CDFG 1983, revised 2001). The survey area included the southeast portion of the project site near the parking lot and Hollister Avenue, with special attention given to the area where two possible southern tarplants were identified in 2011. The floristic survey was performed during the time period when the southern tarplant was in its most identifiable condition, the blooming season (May-November). In 2011, southern tarplant started flowering in late May to early June within the Goleta area. Surveys were conducted on foot in belt type transects, and additional time was spent within suitable habitat.

### **Regional Setting**

The project site is situated on a coastal plain and lies within the Devereux Watershed, approximately one and one-half miles north of the Pacific Ocean and one mile south of the foothills of the Santa Ynez Mountains. The Devereux Slough is an approximately 50-acre estuarine habitat located downstream and generally one mile south of the project site. The project site does not drain to the Goleta Slough.

The climate of the Goleta coastal plain is Mediterranean, characterized by a warm, dry “summer,” extending from May through October and a mild, moist “winter” lasting from November through April. Due to the moderating effect of the Pacific Ocean and lower elevations, temperatures are less extreme along the coastal plain compared to more inland locations. Summer maximum temperatures average in the 70s (degrees F), while minimums average in the 50s to low 60s. Maximum temperatures during the winter months average in the 60s, with minimums in the 40s. Temperatures slightly below freezing are not uncommon during the coldest mornings of the year. Annual precipitation is approximately 18 inches, the majority of which is produced by winter storm systems from the north Pacific with January as the wettest month. Precipitation rarely results from summer tropical moisture. Fog and low clouds are most frequent during spring and summer when the ocean is relatively cool and the marine layer is drawn inland by the rising of warm air above the land. The warmest, driest conditions occur in the fall, when fog is infrequent.

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

## Project Site Conditions

The project site is located in west Goleta, north of the Camino Real Marketplace. The site area totals 23.55 acres and consists of a large undeveloped area and a small development in its southeastern corner, including a television studio and two drive-thru ATM facilities surrounded by an asphalt parking lot. A line of exotic tree and shrub landscaping separates the developed southeastern corner from the remainder of the site.

The project site is bounded to the north by the US Highway 101 (US 101) and the Union Pacific Railroad (UPRR) right-of-way (ROW). Its western boundary approximately coincides with a series of retaining walls that separate the site from several developed research and development lots constructed at the elevation of Santa Felicia Drive. These properties face Santa Felicia Drive, and back up to the project site. Hollister Avenue, a divided, four-lane boulevard, forms the project site’s southern boundary. The site is bounded on the east side by Glen Annie Road. An electrical substation, residential uses and office uses are located along the east side of Glen Annie Road.

Aerial photographs reveal that the topography at the project site has not been altered significantly since 1967; however, the topography has been modified over time due to the following developments:

- 1880 Railroad Cut  
A relatively deep man-made swale, or ditch, on the north end of the project site is a remnant of an abandoned railroad bed, which pre-dates 1938 aerial photographs.
- 1960s Storke/101 interchange  
Adjacent lands to the east and west were graded down, apparently in the late 1960s. High ground to the east apparently was borrowed to construct the Storke Road overpass at the railroad and US 101 interchange.

- 1970/1980s Santa Felicia  
High ground to the west apparently was used in cut-and-fill grading to create a flat surface across all the lots surrounding Santa Felicia Drive.
- 1970/1980s onsite road crossings  
Aerial photographs from the 1970s and 1980s show two dirt roads crossing the site at right angles, forming a north to south and east to west 'foursquare' pattern. The 'foursquare' pattern appears on the updated USGS 15' Goleta quadrangle map. The historical access point to these dirt roads was from Glen Annie Road and, at least part of the time, the aforementioned remnant railroad bed (now a deep man-made swale, or ditch) was connected to this small network. During this period, the project site may have been used to receive fill, as undulations are visible in the center of the site and parts of the northern quadrants of the site, which could be consistent with loads of disposed soil. The east-west road was so compacted that it is still visible as a swale today.

## Existing Biological Resources

### *Vegetation and CDFG Sensitive Plant Communities*

The April 2005 surveys by Dudek and the December 2010 and April 2011 surveys by Envicom Corporation showed that the project site is vegetated predominantly by Non-native Grassland, as shown on **Figure 4.3-1**. The Non-native Grassland community is dominated by common, mostly annual species that are not native to California. Rippgut grass (*Bromus diandrus*), wild oat (*Avena* spp.), wild radish (*Raphanus sativus*), and several species of vetch (*Vicia* spp.) dominate the northern half of the site. On the southern half of the site, small swales that occupy low spots and old compacted roadbeds are dominated by Italian ryegrass (*Lolium multiflorum*), six-weeks fescue (*Vulpia bromoides*), rattail fescue (*V. myuros*), and sheep sorrel (*Rumex acetosella*). English plaintain (*Plantago lanceolata*), foxtail barley (*Hordeum murinum*), and bur clover (*Medicago polymorpha*) are among the species that are common throughout the site. Very few herbaceous native species were encountered, and these only in low abundance, including western ragweed (*Ambrosia psilostachya*) and morning-glory (*Calystegia macrostegia* ssp. *cyclostegia*). Perennial native grasses observed at the site include California meadow barley (*Hordeum brachyantherum* spp. *californicum*) and California brome (*Bromus carinatus*). For a list of vascular plant species identified at the project site, see **Appendix B**.

Although occasional individuals of native shrubs were encountered, mostly coyote bush (*Baccharis pilularis*), no shrub-dominated habitat occurs on the site outside the landscaped border of the developed southeastern corner, or the landscaped western boundary. A few non-native cork oaks (*Quercus suber*), one native coast live oak (*Q. agrifolia*), and one individual native valley oak (*Q. lobata*) occur on the northeast corner of the site, opposite the electrical substation. These trees are too few in number to constitute a woodland, and are instead considered here as individual trees.

Exotic landscaped areas in the southeast, bordering the commercial building, and along the western boundary include herbaceous, shrub, and tree components. On the western boundary, the low-growing and succulent Hottentot-fig (*Carpobrotus edulis*) is dominant. Elsewhere, assorted species of Eucalyptus, bottlebrush (*Callistemon citrinus*), fan palm (*Sabal palmetto*), Spanish bayonet (*Yucca faxoniana*), yew-pine (*Podocarpus macrophylla*), and sweetgum (*Liquidambar styraciflua*) are dominant.





**Legend**

- Project Boundary
- - - Ditch Boundary
- Protected Tree\*

**Vegetation**

**Non-Native Grasslands**

- NG Non-Native Grasslands

**Wetland ESHAs**

- City of Goleta Wetlands
- Pale Spike Rush Alliance (*Eleocharis macrostachya*)

**Native Grassland ESHA**

- California Meadow Barley Grassland (*Hordeum brachyantherum* ssp. *californicum*)

**Individual Trees**

- Qa Coast Live Oak (*Quercus agrifolia*)
- Ql Valley Oak (*Quercus lobata*)
- Qr Cork Oak (*Quercus suber*)
- Yf Spanish Bayonet (*Yucca faxoniana*)

**Exotic Landscapes**

- E Eucalyptus
- L Landscaping
- Ce Hottentot Fig (*Carpobrotus edulis*)

**Other**

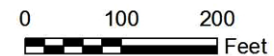
- P Paved Area
- B Buildings

\* Protected tree pursuant to City of Goleta General Plan Conservation Element.

Aerial Source: County of Ventura, 2005.

WESTAR MIXED-USE VILLAGE

# Vegetation Map



### **CDFG Sensitive Plant Communities**

Plant communities at the project site were correlated with those plant communities included in the *List of Vegetation Alliances and Associations (Natural Communities List)*, published by the CDFG in September 2010. The *List of Vegetation Alliances and Associations* is a comprehensive list, as of September 2010, of officially recognized plant communities occurring within the State of California. *A Manual of California Vegetation, 2<sup>nd</sup> ed.* (Sawyer et al.) was also consulted for its descriptions and classification rules for plant community alliances.

The plant communities listed in the *List of Vegetation Alliances and Associations* and *A Manual of California Vegetation – 2nd ed.* are classified based on a system that is the California expression of the National Vegetation Classification (Grossman et al. 1998). This classification is hierarchical in nature: alliances are the generic vegetation unit and associations are the specific unit. Associations capture the variety within a vegetation alliance in the same way that species capture the variety in a genus. This classification system is used by CNPS and CDFG to map, classify and establish the significance and rarity of vegetation types in California. Alliances and associations are defined by plant species composition and abundance, as well as the underlying abiotic characteristics of the stand, e.g., slope, aspect, or soil type.

A conservation status rank (also known as “rarity rank”) is used to determine the sensitivity of plant communities. The *List of Vegetation Alliances and Associations* provides a conservation status rank for each Alliance. The conservation status ranking system, which was developed by NatureServe and has been adopted by the CDFG, consists of a geographic scale (G=Global; S=State) and a degree of threat (1=critically imperiled; 2=imperiled; 3=vulnerable to extirpation or extinction; 4=apparently secure; and 5=demonstrably widespread, abundant, or secure). Plant community alliances with global or state conservation status ranks of G1 through G3, or S1 through S3, respectively, are sensitive. Sensitive plant communities are protected pursuant to CEQA, and impacts to these communities must therefore be avoided or mitigated.

The only naturally occurring CDFG plant communities at the project site are Non-native Grassland and the Pale Spike Rush (*Eleocharis macrostachya*) Alliance. Non-native Grassland and the Pale Spike Rush Alliance each receive a conservation status rank of G4S4 (Global, apparently secure; State, apparently secure), and are therefore not considered sensitive plant communities by the CDFG.

### **Wetlands**

Wetlands are lands where saturation with water is the dominant factor determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. Wetlands are sensitive habitats and are typically productive systems of high biological value. Wetlands are protected and regulated by a number of Federal, State, and local policies.

For the purposes of determining potentially significant impacts, the City of Goleta General Plan/[Coastal Land Use Plan](#) (CE 3.1) defines a wetland as any area that meets the definition of a wetland as defined by the California Coastal Commission, California Department of Fish and Game, or the US Fish and Wildlife Service. The most protective of definitions shall be applied and used to determine the boundary of a wetland. The City of Goleta uses the identification of a single indicator (hydric soil, predominance of hydrophytic vegetation, or wetland hydrology) to determine the boundary of a wetland, based on the wetland definition from Cowardin (1979). This definition reads:

“For purposes of this classification wetlands must have one or more of the following three attributes:

- a) At least periodically, the land supports predominately hydrophytes, that is, plants adapted to moist areas.
- b) The substrate is predominately un-drained hydric soil, and
- c) The substrate is non soil and is saturated with water or covered by shallow water at some time during the growing season of each year.”

A total of 0.052 acres (2,265 square feet) of low-functioning isolated wetland habitat occur onsite within two distinct hydrological areas, an old railroad cut in the northern portion of the site and isolated depressions in the southern portion of the site (Figure 4.3-1). These wetland areas do not meet the necessary criteria to be considered jurisdictional Army Corps of Engineers (ACOE) wetland or non-wetland Waters of the U.S. or CDFG streambed or riparian habitat. However, these areas do meet the City of Goleta definition of a wetland. For a detailed discussion of the wetland determination and delineation for the site, see *Wetland Delineation of the Westar Hollister Avenue Property* (May 19, 2011) in Appendix B. A description of each wetland area is presented below.

The old railroad cut is a relatively deep man-made swale, or ditch, that contains a remnant of an abandoned railroad bed (tracks are no longer extant). The abandoned railroad bed, which is below-grade, contains two narrow hydrologic features separated by a slightly elevated portion of the bed. It generally slopes from the west to the east, but does not appear to convey surface flow to Glen Annie Road. Rainwater and local sheet flow collect in topographically low areas in the bed with clay loam soil and low permeability. Consequently, two isolated seasonal wetlands occur in the bottom of the bed, which are referred to herein as Wetland 1 – Rye-Grass Wetland and Wetland 2 – Emergent Wetland.

#### **Wetland 1 – Rye-Grass Wetland**

Wetland 1 is a 0.016-acre (697 square feet) seasonal wetland situated in a narrow, low area of the abandoned railroad bed (Refer to Figure 4.3-1). It is dominated by Italian rye grass (*Lolium multiflorum*; FAC; 75 percent mean absolute coverage).<sup>1</sup> Subdominant plant species include California meadow barley (*Hordeum branchyantherum* ssp. *californicum*; FACW, 15% absolute mean coverage) and curly dock (*Rumex crispus*; FACW, 2.5 percent mean absolute coverage). The hydrophytic vegetation criterion was met by a dominance test score of 100% and the hydric soil criterion was met based on the presence of redox depressions. Surface soil cracks and oxidized rhizosphere along living roots confirm the presence of seasonal wetland hydrology. In

<sup>1</sup> Plant Wetland Indicator Status Categories (US ACOE 1987):

OBL = Obligate Wetland – Occur almost always (estimated probability >99%) under natural conditions in wetlands.

FACW = Facultative Wetland – Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands.

FAC = Facultative – Equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).

FACU = Facultative Upland – Usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%).

UPL = Obligate Upland – Occur in wetlands in another region, but occur almost always (estimated probability >99%) under natural conditions in non-wetlands in the region specified. If a species does not occur in wetlands in any region, it is not on the National List.

None = No indicator status given in Reed.

conclusion, the rye-grass wetland satisfies all three wetland criteria of hydrophytic vegetation, hydric soil, and wetland hydrology.

### **Wetland 2 – Emergent Wetland**

Wetland 2 is a 0.023-acre (1,002 square feet) seasonal wetland situated in a narrow, low area of the abandoned railroad bed (Refer to Figure 4.3-1). It is dominated by pale spike rush (*Eleocharis macrostachya*; OBL, 35 percent absolute coverage) and loosestrife (*Lythrum hyssopifolium*; FACW, 55 percent absolute coverage). Subdominant plants included California meadow barley (FACW, 15 percent mean absolute coverage) and curly dock (FACW, 2.5 percent mean absolute coverage). The hydrophytic vegetation criterion was met by a dominance test score of 100% and the hydric soils criterion was met based on the presence of redox depressions. Wetland hydrology was evident based on the presence of surface water and oxidized rhizospheres along living roots. In conclusion, the emergent wetland satisfied all three wetland criteria.

### **Isolated Depressions 1 and 2**

The southern portion of the site contains flat to slightly undulating topography with isolated depressions capable of supporting short-term inundation. These low-lying areas clearly drain more slowly, and the soil remains moist for a longer period than on higher elevations on the site. It is unlikely that storm event related inundation of these on-site hydrologic features persists for more than a few weeks. Two of the depressions, which total 0.013 acres (566 square feet), satisfy the City's single-parameter wetland criteria. Isolated Depression 1 is 0.003 acres (131 square feet) and Isolated Depression 2 is 0.01 acres (435 square feet). These depressions are situated in the southern portion of the site near the parking lot in the southeastern corner of the site and Hollister Avenue (Refer to Figure 4.3-1).

Isolated Depression 1 is dominated by curly dock (FAC, 15 percent absolute coverage) and Italian ryegrass (FAC, 15 percent absolute coverage). The dominant plant species at Isolated Depression 2 are English plantain (*Plantago lanceolata*; FAC, 35 percent absolute coverage) and California meadow barley (FACW, 20 percent absolute coverage). Subdominant plants include curly dock and Italian rye grass. No soil samples were taken from the isolated depressions due the high percentage of clay and absence of moisture, which made it difficult to penetrate the top two inches of soil. These depressions are inundated for short periods estimated at up to a few weeks following rainfall. No indicators of wetland hydrology are present. In conclusion, the hydrophytic vegetation criterion was met at Isolated Depressions 1 and 2 by a dominance test score of 100%.

### **Vernal Pools**

Keeler-Wolf (1998) defines vernal pools as seasonally flooded landscape depressions underlain by a subsurface, which limits drainage. They result from an unusual combination of soil conditions, summer-dry Mediterranean climate, topography and hydrology, and support a specialized biota, including a relatively large number of threatened and endangered species. Although the number of plant species found in any individual vernal pool is typically low (15-25 species), the available data suggest that the pools support a uniquely adapted flora which contains a significant proportion of regional and localized endemic species as well as an abundance of rare, threatened, or endangered species (Keeler-Wolf 1998). Vernal pools are also characterized by a specialized suite of animal species with life histories enabling them to inhabit the highly variable vernal pool ecosystem. The fauna includes a variety of crustaceans (e.g. fairy shrimp, clam shrimp, and tadpole shrimp) and insects (e.g. beetles and solitary bees)



as well as the more conspicuous spadefoot toads (*Scaphiopus hammondi*), tiger salamanders (*Ambystoma californiense*), waterbirds such as killdeer, avocet, greater yellowlegs, cinnamon teal, and mallard also frequently utilize vernal pool habitat (Keeler-Wolf 1998).

No vernal pool vegetation types or habitat with the capability to support special-status aquatic invertebrates, including fairy shrimp, were observed at the site (Dudek, May 19, 2011). The entire site is highly disturbed and manipulated. Wetland 1 – Rye-grass Wetland and Wetland 2 – Emergent Wetland are not vernal pools. These wetlands have clearly not formed under natural conditions. Also, Isolated Depressions 1 and 2 are not vernal pools or ephemeral wetlands, as the depressions do not contain an assemblage of biota found in natural vernal pool or ephemeral wetland habitats within the Santa Barbara region.

### **Environmentally Sensitive Habitat Areas (ESHA)**

Areas meeting the City of Goleta's wetland definition (CE 3.1) are ESHA, pursuant to City of Goleta General Plan/Coastal Land Use Plan policy CE 3.2 Designation of Wetland ESHAs, which states: "all wetlands are defined as ESHAs." Also, areas where native grassland species occupy more than 10% relative vegetatcover are native grassland ESHAs pursuant to CE 5.2(a). According to *Wetland Delineation of the Westar Hollister Avenue Property* (May 19, 2011), the native perennial grass California meadow barley occupies 15% absolute cover at wetland sampling points associated with Wetland 1 – Rye-grass Wetland, 15% absolute cover at sampling points associated with Wetland 2 – Emergent Wetland, and 20% absolute cover at the sampling point associated with Isolated Depression 2. The 10% relative cover threshold is therefore exceeded at each of these areas. The areas at Wetland 1 and Isolated Depression 2 that contain 10% or greater relative cover of California meadow barley are native grassland ESHAs, in addition to their coincident status as wetland ESHAs (Refer to Figure 4.3-1). The vegetation at Wetland 2 – Emergent Wetland contains wetland plant species and is not native grassland. The native grass California brome occurs on the property only as widely scattered and very small patches on drier microsites, and does not constitute native grassland habitat.

The City of Goleta General Plan/Coastal Land Use Plan Conservation Element (Figure 4-1) shows the nearest offsite ESHAs to be El Encanto Creek and one small Riparian/Marsh/Vernal Pool, both to the west, and one of the latter to the south, in the southern half of the Camino Real Marketplace south of Santa Felicia Drive and north of Phelps Road. The Devereux Slough is an approximately 50-acre estuarine habitat located downstream and generally south of the project site. The Devereux Slough is designated as ESHA by the University of California, Santa Barbara's Long Range Development Plan (September, 2010).

### **Sensitive Plant Species**

Sensitive plant species either have unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors. Herein, the term "sensitive" is used to denote those species that meet the criteria of CEQA Guidelines Section 15380 as an endangered, rare, or threatened Species, whether or not officially listed, as provided in Section 15380(d). Sensitive plant species include either of the following:

- Plant species that are listed, proposed for listing, or meet the criteria for listing as endangered, threatened, or rare by under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA); or
- Plant species that are listed on the CDFG Special Vascular Plants, Bryophytes and Lichens List, which includes the California Native Plant Society (CNPS) Inventory of

Rare and Endangered Vascular Plants. Plants on the CNPS List 1B (which includes rare, threatened, or endangered species, in CNPS's opinion, in California and elsewhere) and List 2 (plants considered rare, threatened, or endangered in California, but more common elsewhere) are considered sensitive.

CEQA Guidelines, Section 15125(a), also direct that special emphasis should be placed on resources that are rare or unique to the region.

No sensitive species are expected to occur on the project site. The California Natural Diversity Database Rarefind 3 application (CDFG January 2011) search for reported sensitive Element Occurrences (EO) for the three coastal quadrangles Dos Pueblos Canyon, Goleta, and Santa Barbara returns eighteen sensitive elements:

- Black-flowered figwort (*Scrophularia atrata*)
- Contra Costa goldfields (*Lasthenia conjugens*)
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*)
- Coulter's saltbush (*Atriplex coulteri*)
- Davidson's saltscale (*Atriplex davidsonii*)
- Estuary seablite (*Suaeda esteroa*)
- Late-flowered mariposa-lily (*Calochortus fimbriatus*<sup>2</sup>)
- Mesa horkelia (*Horkelia cuneata* var.<sup>3</sup> *puberula*)
- Nuttall's scrub oak (*Quercus dumosa*)
- Pale-yellow layia (*Layia heterotricha*)
- Refugio Manzanita (*Arctostaphylos refugioensis*)
- Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*)
- Santa Barbara morning-glory (*Calystegia sepium* ssp. *binghamiae*)
- Santa Lucia dwarf rush (*Juncus luciensis*)
- Santa Ynez false lupine (*Thermopsis macrophylla*)
- Sonoran maiden fern (*Thelypteris puberula* ssp. *sonorensis*)
- Southern tarplant (*Centromadia parryi* ssp. *australis*)
- Umbrella larkspur (*Delphinium umbracolorum*)

None of these species were observed on the project site by any investigators in 2005, 2010, or 2011, with the possible exception of southern tarplant, which is discussed below. The remainder of these species are presumed absent.

### **Southern tarplant (*Centromadia parryi* ssp. *australis*)**

The southern tarplant is an annual herb in the sunflower family (Asterceae) that blooms from May to November. It is typically found in vernal pools, on the margins of marshes, and in vernal mesic grassland habitat. It is included on the CNPS 1B.1 list, indicating it is rare, threatened, or endangered in California and elsewhere, and is seriously endangered in

<sup>2</sup> The name in The Jepson Manual (Hickman [ed.] 1993) and CNDDDB is given as *Calochortus weedii* var. *vestus*. However, Jepson Online Interchange indicates this is a synonym of *C. fimbriatus*.

<sup>3</sup> The name in The Jepson Manual (Hickman [ed.] 1993) and CNDDDB is given as a subspecies. However, Jepson Online Interchange indicates a correction to variety.

California. Habitats at the site have the potential to support this species, in particular the margins of areas that are seasonally inundated. This species is also known to persist in disturbed habitats.

Rindlaub (Dudek 2005) reports that southern tarplant was found on the adjacent Camino Real Project along dirt paths in the central part of the 83-acre site. She indicates that southern tarplant may not have been very visible during botanical surveys of the Westar project site conducted in April 2005 as this species flowers in the summer. Seedlings could have been overlooked if they were growing among the grasses.

Envicom Corporation conducted a springtime survey in April 2011, and found two possible southern tarplant remnants on-site. Although the possible southern tarplants were dead, their characteristic spiny skeletons remained erect and persistent, and were easily observed. Sample plant material taken from the dead specimens at the project site was examined and also compared to dead plants at known populations of the southern tarplant in Thousand Oaks (Ventura County) and in the Goleta area. There is a high probability the plants were the southern tarplant.

The southern tarplant was not found during two focused surveys for the species conducted by Dudek biologists in June 2011. Dudek concluded that although two individuals were previously found on-site, it is unlikely that a stable population exists on the property (Dudek 2011). Envicom Corporation peer reviewed the Dudek survey report and supports this conclusion. For a detailed discussion of the southern tarplant survey, see *Focused Southern Tarplant Survey at the Westar Hollister Avenue Property* (July 11, 2011) in Appendix B.

### **Protected Native Trees**

The Goleta General Plan/Coastal Land Use Plan Conservation Element Policy CE 9 provides for the protection of native trees and woodlands, including definitions, standards for development, and mitigation of impacts. According to the policy, new development shall be sited and designed to preserve native oaks (*Quercus* spp.), walnut (*Juglans californica*), sycamore (*Platanus racemosa*), cottonwood (*Populus* spp.), willows (*Salix* spp.), or other native trees that are not otherwise protected in ESHAs. Coast live oak trees of specimen size (generally with a diameter of at least 4 inches about 4.5 feet above soil level [dbh]) are protected under this policy because these trees provide important habitat and food resources to many other species.

Several oak trees were found growing on the northeast corner of the project site. The assemblage included several cork oak (*Quercus ruber*), a Mediterranean species, a small valley oak (*Quercus lobata*) with a dbh about 2 inches, which is not native to the south coast (Smith 1998), as well as one double-trunked coast live oak (*Quercus agrifolia*). The coast live oak, whether planted or a volunteer, estimated to be 15 inch dbh, qualifies as a protected tree under Policy CE 9.

### **Observed Wildlife and Wildlife Habitat**

Habitat for wildlife consists primarily of Non-native Grassland, areas of seasonal inundation, and assorted trees, mostly non-native, as discussed above. In 2005, Rindlaub (Dudek 2005) observed two reptile species, fifteen bird species, and two mammal species. These included Great Basin fence lizard (*Sceloporus occidentalis longipes*), California alligator lizard (*Elgaria*

*multicarinata multicarinata*), great blue heron<sup>4</sup>, red-tailed hawk, western or California gull, mourning dove, Anna's hummingbird, western scrub-jay, American crow, cliff swallow, black phoebe, northern mockingbird, European starling, common yellowthroat, white-crowned sparrow, Brewer's blackbird, house finch, striped skunk (*Mephitis mephitis*), and Botta's pocket gopher (*Thomomys bottae*). The presence of California voles (*Microtus californicus*) was implied, and Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), dogs (*Canis familiaris*), and cats (*Felis catus*) could also utilize this site on a regular basis.

In December 2010 and April 2011, Envicom Corporation biologists observed several of the above species, in addition to some common winter resident bird species including yellow-rumped warbler and dark-eyed junco. Also observed were Pacific treefrog (*Hyla regilla*) [at Wetland 2 – Emergent Wetland], Eurasian collared dove, rock dove, turkey vulture, American kestrel, Bewick's wren, Say's phoebe, lesser goldfinch, rufous hummingbird, hooded oriole, house wren, and large numbers of western meadowlarks. Additional mammals observed were high numbers of California ground squirrel (*Spermophilus beecheyi*), brush rabbit (*Sylvilagus bachmanii*), and dog, inferred from scat. A beehive was observed in a metal refuse container.

### **Sensitive Wildlife Species**

For the purposes of this analysis, the term "sensitive" is used to denote those species that meet the criteria of CEQA Guidelines Section 15380 as an endangered, rare, or threatened species, whether or not officially listed, as provided in Section 15380(d). Our discussion of sensitive wildlife species includes those that are:

- Listed, proposed for listing, or meet the criteria for listing as endangered, threatened, or rare by under FESA or CESA; or
- Listed on the CDFG's Special Animals list with a designation of CSC (California Species of Special Concern)<sup>5</sup> or CFP (California Fully Protected)<sup>6</sup>.

CEQA Guidelines, Section 15125(a), also directs that special emphasis should be placed on resources that are rare or unique to the region.

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<sup>4</sup> Scientific names of birds are omitted, since common names are standardized.

<sup>5</sup> CSC – California Species of Special Concern.

A California Species of Special Concern is a species, subspecies or distinct population of an animal native to California that currently satisfies one or more of the following (not necessary mutually exclusive) criteria:

- Is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- Is listed as Federally- but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- Is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; and has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

<sup>6</sup> CFP – California Fully Protected Species.

A California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

No sensitive species were observed during biological surveys of the site in 2005 or in 2010. The California Natural Diversity Database Rarefind 3 application search for reported sensitive Element Occurrences (EO) for the three coastal quadrangles Dos Pueblos Canyon, Goleta, and Santa Barbara returns fourteen sensitive elements:

- Mimic tryonia [Calif. brackishwater snail] (*Tryonia imitator*)
- Globose dune beetle (*Coelus globosus*)
- Sandy beach tiger beetle (*Cicindela hirticollis gravida*)
- Monarch butterfly (*Danaus plexippus*) (autumnal and winter aggregation sites)
- Tidewater goby (*Eucycloglobius newberryi*)
- California red-legged frog (*Rana draytonii*)
- Southwestern Pond Turtle (*Emys marmorata pallida*)
- **Ferruginous hawk (*Buteo regalis*)**
- **White-tailed kite (*Elanus leucurus*)**
- Western snowy plover (*Charadrius alexandrinus nivosus*)
- Belding's savanna sparrow (*Passerculus sandwichensis beldingi*)
- Light-footed clapper rail (*Rallus longirostris levipes*)
- Bank swallow (*Riparia riparia*)
- **Big free-tailed bat (*Nyctinimops macrotis*)**

The species listed in bold type on the above list, as well as additional species discussed further below, have potential to occur at the site. Other species on the above list would be highly unlikely or precluded from occurring at the project site, based on consideration of the availability of preferred habitats. However, due to the presence of Eucalyptus trees and the seasonal, short-term ponding of water at the site, further discussion is warranted concerning the potential for occurrence of the California red-legged frog, southwestern pond turtle, and monarch butterfly autumnal and winter aggregation sites, which is provided below.

### Monarch Butterfly Autumnal and Winter Aggregation Sites

Monarch butterflies, in low numbers, were observed at the project site by Envicom Corporation biologists in December 2010. Monarch butterfly (*Danaus plexippus*) is designated by CDFG (2011) as a "Special Animal,"<sup>7</sup> but without any State or Federal Endangered Species Acts listing status. Nonetheless, the Goleta General Plan/Coastal Land Use Plan Conservation Element Policy CE 4 provides for protection of Monarch butterfly Habitat Areas, including definitions, designation of ESHAs, unmapped Monarch ESHAS, protection, buffers, and standards for development.

Eucalyptus groves are most commonly used by the monarch butterfly as autumnal and winter aggregation sites, or roosts, although the butterflies also utilize oaks, sycamores, and cypress. The location and structural characteristics of a grove appear to be more important than the species of tree. Those characteristics include stands of suitable trees that offer shelter from strong winds and storms, provide microclimate with adequate sunlight, and are situated near a source of nectar and water.

<sup>7</sup> CDFG (2011) defines a Special Animal "as a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal protection status." "This list is also referred to as 'species at risk' or 'special status species'."

Monarch butterflies are expected to visit the Eucalyptus trees on and around the project site to feed, but the trees on the property are too thinly distributed to provide protection from strong winds and winter storms. Moreover, extensive inventories of Monarch habitats have been conducted in the area, and the project site has never been identified as a roost location. The nearest winter roosts are to the east in the Los Carneros Creek/Lake Los Carneros area, and to the southwest on Ellwood Mesa. Aggregation sites are known north of US 101 between Ellwood and Lake Los Carneros, along Devereux Creek (southwest of the project site), and at the Hughes Business Park a few blocks west of the project site) on Coronado Drive (Meade 1999). In conclusion, the site has not historically supported, nor does the site have the potential to support, autumnal and winter aggregations of Monarch butterflies.

### **California Red-Legged Frog**

California red-legged frog (*Rana draytonii*) was federally listed as Threatened by the US Fish and Wildlife Service in 1996, and is a CDFG designated "Species of Special Concern" [CSC]. Red-legged frogs require aquatic breeding habitat that persists for a minimum of 20 weeks in all but the driest of years (USFWS, 2010). The project site would not contain pooled water long enough for California red-legged frogs to reproduce. Red-legged frogs are known to occur in permanent aquatic habitats located at least 1.5 miles to the west of the project site. Given the distance and the significant impediments to movement between the project site and these areas, as well as the unsuitable habitat conditions at the site, red-legged frogs are not considered to have any reasonable potential to occur.

### **Southwestern Pond Turtle**

Southwestern Pond Turtle (*Emys marmorata pallida*) is a CDFG designated Species of Special Concern. These small turtles leave major stream channels during the rainy season to avoid being swept away during high water flows. Females lay their eggs in nests dug in high, dry ground, where hatchlings remain until the onset of the rainy season. Pond turtles inhabit Glen Annie Creek; the northbound US Highway 101 off-ramp at Storke Road was designed specifically to avoid impacts to the resident population of this species (L. Hunt, personal communication [Dudek 2005 op cit.]). Although southwestern pond turtles are known to use upland habitats within a few hundred feet of permanent water sources, given the distance and substantial impediments to movement between suitable habitats and the project site, as well as the unsuitable aquatic habitat conditions at the project site itself (lack of a permanent water source), southwestern pond turtles are not considered to have any reasonable potential to occur.

### **Two-striped garter snake**

Two-striped garter snake (*Thamnophis hammondi*) is another CDFG designated Species of Special Concern that inhabits nearby Glen Annie Creek (L. Hunt, personal communication [Dudek 2005 op cit.]). This species moves out of aquatic habitats in search of prey. It may persist in developed areas with well irrigated landscaping, particularly when landscaping includes water features.

These aquatic species could have used the project site in the past as a refuge site during periods of high water, and/or as summer refuge sites prior to development of the surrounding lands. Today, however, the steep railroad berm, Hollister Avenue, and the vertical retaining walls on the western boundary essentially have cut off access to the site along the northern, western, and southern boundaries. Now that a housing development separates the project site from the creek to the east, the two-striped garter snake is unlikely to arrive on the site from that



direction. Instead, individuals of these species that inhabit the area near the US 101/Storke Road/Hollister Avenue junction are most likely to spread out into the favorable habitat north and east of Glen Annie Creek rather than negotiate the barriers that surround the project site. This species is not expected to occur at the project site.

### **Raptors Nesting, Roosting, and Foraging Habitat**

The City of Goleta General Plan/Coastal Land Use Plan extends protection to raptor nesting and roosting sites, by designating nesting and roosting sites as Environmentally Sensitive Habitat Areas (ESHA). The City requires that new development be setback at least 100 feet from active and historical raptor nests that qualify as ESHA, when feasible. Also, virtually all species of birds are protected from unlawful take, possession, or destruction of nests or eggs under California Fish & Game Code Section 3503. Birds of prey, i.e., falcons, hawks, harriers, eagles, kites, and owls, are specifically protected under California Fish & Game Code Section 3503.5. Additional provisions are made in California Fish & Game Code Section 3511 for Fully Protected birds including American peregrine falcon, golden eagle, southern bald eagle, and white-tailed kite, among others. Several of these birds of prey, and other bird species, are also covered by provisions of the Federal Migratory Bird Treaty Act of 1918.

Raptor nests were not observed during biological surveys of the site, and the City General Plan/Coastal Land Use Plan does not have a record of a historical raptor nest at or in the vicinity of the project site. Sensitive and non-sensitive raptors are very unlikely to nest at the project site due to lack of quality nesting habitat and the proximity of the site to existing development, noise, and human activities, or because the Goleta area is outside of the species current breeding range. The project site also lacks habitat for communal roosts of turkey vultures or white-tailed kites.

City of Goleta General Plan/Coastal Land Use Plan policy CE 8.2 requires that all development be located, designed, constructed, and managed to avoid disturbance or adverse impacts to sensitive (special-status) species and their habitats, including nesting, rearing, roosting, *foraging*, and other elements of required habitats. The City of Goleta Environmental Thresholds and Guidelines Manual instructs that a project may result in a significant impact if it substantially fragments, eliminates, or otherwise disrupts foraging areas and/or access to food resources.

The project site is estimated to be of moderate value to foraging raptors. Two important factors influencing habitat quality for foraging are prey density, as well as habitat features affecting prey accessibility, such as suitable perches.<sup>8</sup> A number of prey species including Botta's pocket gophers, California ground squirrels, brush rabbits, various passerines, and western fence lizards, as well as several rodent burrows were observed during biological surveys of the site. The limited connectivity of the site to other suitable habitats may affect the prey density and ability of prey populations to rebound following cyclical declines. The project site itself and adjacent areas contain perching habitat for foraging raptors, including trees of various sizes and fences, as well as tall posts adjacent to the project site.

The open grasslands and trees on the site are attractive as foraging areas to several species of raptors, including red-tailed hawk, red-shouldered hawk, American kestrel, and white-tailed kite; species that breed in the south coastal area. Northern harrier and short-eared owl are winter visitors that forage in grasslands. Resident Cooper's hawks, and winter visitant sharp-shinned hawks hunt songbirds that feed in grasslands and landscape areas. Both white-tailed kite and

<sup>8</sup> Widen, P. 1994. Habitat quality for raptors: a field experiment. J. Avian Biology 25: 219-223.

burrowing owl were recorded from the Camino Real Marketplace site, although burrowing owls, like northern harriers and short-eared owls, are both increasingly uncommon on the south coast and more likely to be found in larger grasslands or marsh margins (Lehman 1994). Raptors observed foraging during surveys of the site include resident red-tailed hawk and American kestrel. Other species can reasonably be expected to occur, including resident red-shouldered hawk, Cooper's hawk, barn owl, great-horned owl, western screech-owl, wintering sharp-shinned hawk, ferruginous hawk, northern harrier, short-eared owl, and burrowing owl.

White-tailed kite is a CDFG Fully Protected species, which roosts and breeds on several sites in the Goleta area. These birds hunt in smaller grassland areas (including freeway medians), and would be expected to forage on the project site. White-tailed kites are known to forage up to tens of kilometers from communal roost sites,<sup>9</sup> so when prey reductions occur at the local level, kites have a sufficiently large daily range that they can find other areas to hunt. When collapse of prey populations occurs at the regional scale, kites can vacate an area until prey populations rebuild at which time kites gradually reoccupy suitable foraging areas, nest sites, and roost locations.<sup>10</sup> The local population of white-tailed kites has fluctuated dramatically presumably in response to prey abundance. Kites are a nomadic species able to adopt new home bases and vacate long-used areas quite abruptly.<sup>11</sup> The presence and abundance of white-tailed kites is strongly correlated with the presence of meadow voles.<sup>12</sup> Meadow voles were not observed but can be expected to occur at the project site.

Although the project site is estimated to be of moderate value to foraging raptors, it is of lesser regional importance given its fragmented condition, proximity to urban development, and low native habitat diversity. The project site fragmented, disturbed habitat that is surrounded by development and roads. The Goleta area contains a number of other natural areas that provide comparatively larger expanses and higher value raptor habitat, as evidenced by the documented use and repeated nesting of various species of raptors in these areas. For example, quality raptor habitat exists at Ellwood Mesa, Los Carneros Lake County Park, the Goleta Slough, Coal Oil Point Reserve and vicinity, and the Santa Ynez foothills.

Raptors generally require large home ranges, and individual foraging territories are often measured in terms of tens of acres to square miles. During breeding, demand for prey increases and additional habitat must be available for young birds to disperse from nesting locations and establish new territories. Urban development and other land-use conversion have resulted in the removal of substantial amounts of raptor foraging habitat in the Goleta area. Loss of foraging habitat reduces prey abundance and availability, which reduces and limits the number of raptors a given area can support. In general, smaller populations are less resilient to environmental stress, e.g. drought, disease, and fluctuations in prey availability.

### **Other Sensitive Bird Species**

Several other sensitive bird species are potentially occurring on the project site. Visitant or transient foraging species could include loggerhead shrike, black swift, Vaux's swift, yellow warbler, yellow-breasted chat, grasshopper sparrow, and Lawrence's goldfinch.

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<sup>9</sup> Poole, A. (Editor). 2005. The Birds of North America Online: <http://bna.birds.cornell.edu/BNA/>. Cornell Laboratory of Ornithology, Ithaca, NY.

<sup>10</sup> Ibid.

<sup>11</sup> Ibid.

<sup>12</sup> Stendell, R. C. 1972. The occurrence, food habits, and nesting strategy of White-tailed Kites in relation to a fluctuating vole population. Phd Thesis. Univ. of California, Berkeley.

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## Mammals

### Bats

The project site is within the range of distribution (Zeiner 1990a; Constantine 1998) of several sensitive species of bats, which are listed as CDFG designated Species of Special Concern. These species include the long-tongued bat (*Choeronycteris mexicana*), western red bat (*Lasiurus blossevillii*), spotted bat (*Euderma maculatum*), Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), big free-tailed bat (*Nyctinomops macrotus*), and western mastiff bat (*Eumops perotis californicus*). These sensitive bats might be expected to forage aerially over the site, but they are not expected to roost, aestivate, or hibernate thereon.

### Other Mammals

The project site is within the range of ringtail (*Bassariscus astutus*), a CDFG Fully Protected species under Fish and Game Code Section 4700. However, the preferred habitats (Zeiner 1990a) consisting of forest and shrublands in close association with rocklands and riparian areas are lacking at the project site. This, in conjunction with the isolation of the site from suitable habitats, probably precludes their presence here. Similarly, American badger (*Taxidea taxus*), a Species of Special Concern, occurs widespread in California, would have little chance of negotiating the obstacles impeding access to the isolated site from more suitable habitats to the north.

### Wildlife Movement

The project site itself is not an important area for wildlife movement, as it is surrounded by urban development and essentially isolated from other undeveloped habitats in the surrounding area. Furthermore, the situation for movement of wildlife between the project site and other natural habitats is highly constrained and tenuous. Urban development and busy surface thoroughfares surround the site on three sides. To the north is the railroad right-of-way, bounded on its north margin by a continuous six-foot chain link fence. Envicom Corporation biologists observed no openings or culverts in close proximity to the site. Access from the north is exacerbated by US 101, which parallels the railroad. In addition, a large residential track is also located north of the freeway. The nearest passage across both of these obstacles is the Glen Annie Canyon/Storke Road overpass. The fact that this is a hard-surface overpass rather than an earth bottom underpass makes it even less desirable and functional for all but a few species such as raccoon, coyote, opossum, ground squirrels, and skunk. The overpass probably results in the mortality or injury of many animals that attempt to cross it. As such, the project site is most likely visited by airborne fauna to utilize the undeveloped site for foraging purposes.

## Fuel Management Plan

The project site has been the site of several small fires since 2008. Due to the history of small fires on site and abundant plant growth in spring of 2011, the Fire Department expressed concerns about waist high grasses and plants (fuel) that had grown across the site. The Fire Department specifically requested for a Fuel Management Plan to be developed with 20-foot to 100-foot wide firebreaks around the perimeter of the site, 20-foot wide firebreaks through the center of the site to divide the property into quarters, and 100-foot wide firebreaks around structures. Pursuant to these requests, Dudek biologists prepared a Fuel Management Plan that was sensitive to potential biological areas of concern, and submitted a Fuel Management Plan map (see Appendix B, Fuel Management Plan Map). The map was vetted by Envicom, City staff, and the Fire Department. It was found that the Fuel Management Plan map

addressed Fire's concerns and would not jeopardize nor compromise biological surveys. As such, the Fuel Management Plan was authorized in May 2011.

The Fuel Management Plan was implemented in June 2011. Firebreaks were staked in the field prior to the start of mowing. Additionally, the firebreaks are to be mowed every three months: June, September, December, and March.

## **Regulatory Setting**

### ***Federal***

#### **Endangered Species Act of 1973**

The Federal Endangered Species Act and implementing regulations, Title 16 United States Code (USC) Section 1531 et seq. (16 USC 1531 et seq.), Title 50 Code of Federal Regulations (CFR) Section 17.1 et seq. (50 CFR Section 17.1 et seq.), include provisions for the protection and management of federally listed threatened or endangered plants and animals and their designated critical habitats. 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**

Section 7 of Fish and Wildlife Coordination Act, 16 USC 742 et seq., 16 USC 1531 et seq., and 50 CFR 17 require consultation if any project facilities could jeopardize the continued existence of an endangered species. Applicability depends on Federal jurisdiction over some aspect of the project (e.g., dredge or fill activities in "waters of the US"). The administering agency is typically the US Army Corps of Engineers (ACOE) in coordination with the US Fish and Wildlife Service (USFWS).

#### **Migratory Bird Treaty Act of 1918**

The Migratory Bird Treaty Act (16 USC Sections 703-711) includes provisions for protection of migratory birds, including the non-permitted take of migratory birds, under the authority of the USFWS and CDFG.

#### **Clean Water Act of 1977, Section 404**

This section of the Clean Water Act (33 USC 1251 et seq., 33 CFR Sections 320 and 323) gives the ACOE authority to regulate discharges of dredge or fill material into waters of the US, including wetlands.

#### **Clean Water Act of 1977, Section 401**

This section of the Clean Water Act requires a State-issued Water Quality Certification for all projects regulated under Section 404. In California, the RWQCB issues Water Quality Certifications with jurisdiction over the project area.

The RWQCB - Central Coast Region, issues Section 401 Water Quality Certifications for applicable project activities in Santa Barbara County.

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## **State**

### **California Endangered Species Act of 1984**

The California Endangered Species Act and implementing regulations in the Fish and Game Code, Section 2050 through Section 2098, include provisions for the protection and management of plant and animal species listed as endangered or threatened, or designated as candidates for such listing. The Act 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” (Section 2090). Plants of California declared to be endangered, threatened, or rare are listed within the California Code of Regulations (CCR) Title 14 Section 670.2. Animals of California declared to be endangered or threatened are listed at 14 CCR Section 670.5. 14 CCR Section 15000 et seq. describes the types and extent of information required to evaluate the effects of a project on biological resources of a project site.

### **California Species Preservation Act 1970: California Fish and Game Code Sections 900 – 903**

This law includes provisions for the protection and enhancement of the birds, mammals, fish, amphibians, and reptiles of California, and is administered by the CDFG.

### **Fish and Game Code**

The Fish and Game Code provides specific protection and listing for several types of biological resources, including:

- Fully Protected species.
- Streams, rivers, sloughs, and channels.
- Significant Natural Areas.
- Designated Ecological Reserves.

Fully Protected Species are listed in Section 3511 (Fully Protected birds), Section 4700 (Fully Protected mammals), Section 5050 (Fully Protected reptiles and amphibians), and Section 5515 (Fully Protected fishes). The Fish and Game Code of California prohibits the taking of species designated as Fully Protected.

The Fish and Game Code Section 1600 requires a Streambed Alteration Agreement for any activity that may alter the bed and/or bank of a stream, river, or channel. Typical activities that require a Streambed Alteration Agreement include excavation or fill placed within a channel, vegetation clearing, structures for diversion of water, installation of culverts and bridge supports, cofferdams for construction dewatering, and bank reinforcement.

The Fish and Game Code Section 1930 designates Significant Natural Areas. These areas include refuges, natural sloughs, riparian areas, and vernal pools and significant wildlife habitats. An inventory of Significant Natural Areas is maintained by the CDFG Natural Heritage Division and is part of the NDDB. Section 1580 of the Fish and Game Code lists Designated Ecological Reserves. Designated Ecological Reserves are significant wildlife habitats to be preserved in natural condition for the general public to observe and study.

The Fish and Game Code Sections 2081(b) and (c) allow CDFG to issue an incidental take permit for a State listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b). No Section 2081(b) permit may authorize the take of “fully protected” species and “specified birds.” If a project is planned in area where a species or specified bird occurs, an applicant must design the project to avoid all take; the CDFG cannot provide take authorization under this act.

The Fish and Game Code Section 3503 specifies it is unlawful to take, possess, or needlessly destroy the nest of any bird, except as otherwise provided by this code. Section 3503.5 specifies it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey), to take, possess, or needlessly destroy the nest of any such bird, except as otherwise provided by this code.

#### **CEQA, Public Resources Code Section 2100 et seq.**

The CEQA Guidelines provide a framework for the analysis of impacts to biological resources. The administering agency is the CEQA Lead Agency, which is in this case the City of Goleta.

#### **Native Plant Protection Act of 1977**

The Native Plant Protection Act of 1977 and implementing regulations in Section 1900 et seq. of the Fish and Game Code designates rare and endangered plants and provides specific protection measures for identified populations. It is administered by the CDFG.

#### **Public Resources Code Sections 25500 & 25527**

These code sections prohibit the siting of development in certain areas of critical concern for biological resources, such as ecological preserves, wildlife refuges, estuaries, and unique or irreplaceable wildlife habitats of scientific or educational value. If there is no alternative, strict criteria are applied under the authority of the CDFG.

### ***Local***

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

The City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP) includes policies that protect and preserve biological resources within the City by designating specific resources and areas as protected, including Environmentally Sensitive Habitat Areas (ESHA), 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 to biological resources from the land uses and activities that will occur under the GP/CLUP 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.

## **4.3.2 Thresholds of Significance**

### **CEQA Guidelines Appendix G**

In accordance with Appendix G of the CEQA Guidelines, the project would have a significant impact on biological resources if it would:



- a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service;
- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US 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; or
- 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.

## City of Goleta Environmental Thresholds and Guidelines Manual

The City of Goleta's *Environmental Thresholds and Guidelines Manual* defines the following thresholds of significance:

### **Types of Impacts to Biological Resources**

Disturbances to habitats or species may be significant, based on substantial evidence in the record, if they substantially impact significant resources in the following ways:

- g. Substantially reduce or eliminate species diversity or abundance.
- h. Substantially reduce or eliminate quantity or quality of nesting areas.
- i. Substantially limit reproductive capacity through loss of individuals or habitat.
- j. Substantially fragment, eliminate, or otherwise disrupt foraging areas and/or access to food resources.
- k. Substantially limit or fragment range and movement (geographic distribution of animals and/or seed dispersal routes).
- l. Substantially interfere with natural processes, such as fire or flooding, upon which the habitat depends.

### **Less Than Significant Impacts**

The *Environmental Thresholds and Guidelines Manual* provides examples of areas in the City of Goleta where impacts to habitat are presumed to be less than significant, including:

- \_\_\_ Small acreages of non-native grassland if wildlife values are low.
- \_\_\_ Individuals or stands of non-native trees if not used by important animal species such as raptors or monarch butterflies.
- \_\_\_ Areas of historical disturbance such as intensive agriculture.
- \_\_\_ Small pockets of habitats already significantly fragmented or isolated, and disturbed or degraded.
- \_\_\_ Areas of primarily ruderal species resulting from pre-existing man-made disturbance.

### 4.3.3 Project Impacts

#### **Vegetation and CDFG Sensitive Plant Communities<sup>13</sup>**

The project grading limits encompass the entirety of the site. The project would result in the removal of all vegetation. In addition, improvements to Glen Annie Road would affect offsite areas on the eastern side of that road, necessitating the removal of several mature landscape trees. Fuel modification outside the boundary of the project site would not be required. Vegetation to be removed consists of Non-native Grassland, the Pale Spike Rush Alliance, and herbaceous and tree-dominated exotic landscapes. The Non-native Grassland, Pale Spike Rush Alliance, and exotic landscapes at the project site are not considered sensitive by the CDFG. Therefore, the project would not impact CDFG sensitive plant communities.

#### **Sensitive Plant Species<sup>14</sup>**

**Impact BIO 1: The project may result in direct removal of southern tarplant.**

**Significance Before Mitigation: Less than Significant**

Two dead potential southern tarplants (*Centromadia parryi* ssp. *australis*) [CNPS List 1B.1] were observed during spring biological surveys of the site in April 2011, but the southern tarplant was not found during focused surveys in June 2011, a period when the species was known to be blooming and identifiable in the Goleta area. It is considered unlikely that a stable population of southern tarplant exists at the site. Therefore, impacts to southern tarplant are less than significant.

Other sensitive plant species were not observed during biological surveys in April 2005, December 2010, April 2011, or June 2011. Other sensitive plant species with potential to occur have either been verified as absent by surveys or are presumed absent within the project limits of disturbance due to competition from invasive species and the long history of disturbance at the site. Therefore, the project would not result in impacts to sensitive plant species.

#### **Environmentally Sensitive Habitat Areas (ESHA)<sup>15</sup>**

Based on criteria outlined in CE 5.2(a), Protection of Native Grasslands, areas at the site where native perennial California meadow barley comprises 10% or more relative vegetative cover are ESHA. CE 5.2(c) states "Removal or disturbance to a patch of native grasses less than 0.25 acres that is clearly isolated and is not part of a significant native grassland or an integral component of a larger ecosystem may be allowed. Removal or disturbance to restoration areas shall not be allowed." The acreages of the onsite patches of native grassland ESHA, which are associated with Wetland 1 – Rye-Grass Wetland and Isolated Depression 2, are each substantially less than 0.25 acres and are clearly isolated and not part of a significant native grassland. They are also isolated within non-native habitats at a site that is surrounded by urban development. Therefore, impacts to native grassland ESHAs comprised of 10% or more relative cover of California meadow barley are less than significant. However, these areas also have coincident status as wetland ESHAs, the removal of which would be a significant impact, which is discussed below.

<sup>13</sup> -Addresses Thresholds "a", "b", "g", "i", "k."

<sup>14</sup> -Addresses Thresholds "a", "b", "g", and "l."

<sup>15</sup> -Addresses Thresholds "a" – "d", "e" – "g", and "j", "l."

**Impact BIO 2: The project would result in direct removal of 0.052 acres of wetlands.**

**Significance Before Mitigation: Potentially Significant**

Wetland ESHAs at the project site include Wetland 1 - Rye-grass Wetland (0.016 acres), Wetland 2 - Emergent Wetland (0.023 acres), and Isolated Depressions 1 and 2 (0.013 total acres). These areas meet the City of Goleta wetland definition outlined in CE 3.1 of the General Plan/Coastal Land Use Plan, but they are not ACOE or CDFG jurisdictional or vernal pools. These four City of Goleta wetlands would be directly removed by the project. General Plan/Coastal Land Use Plan policy CE 3.5, Protection of Wetlands Outside the Coastal Zone allows for the filling of wetland ESHAs outside of the Coastal Zone under certain conditions. This policy is reproduced below.

**CE 3.5 Protection of Wetlands Outside the Coastal Zone. [GP]** The biological productivity and the quality of inland wetlands shall be protected and, where feasible, restored. The filling of wetlands outside the Coastal Zone is prohibited unless it can be demonstrated that:

- a. The wetland area is small, isolated, not part of a larger hydrologic system, and generally lacks productive or functional habitat value.
- b. The extent of the fill is the least amount necessary to allow reasonable development of a use allowed by the Land Use Element.
- c. Mitigation measures will be provided to minimize adverse environmental effects, including restoration or enhancement of habitat values of wetlands at another location on the site or at another appropriate offsite location within the City.

A wetland buffer of a sufficient size to ensure the biological integrity and preservation of the wetland shall be required. A wetland buffer shall be no less than 50 feet. The buffer size should take into consideration the type and size of the development, the sensitivity of the wetland resources to detrimental edge effects of the development to the resources, natural features such as topography, the functions and values of the wetland and the need for upland transitional habitat. The buffer area shall serve as transitional habitat with native vegetation and shall provide physical barriers to human intrusion. (Amended by Reso. 09-59, 11/17/09)

The four wetland ESHAs at the site are small, isolated, and are not part of a larger hydrologic system. They also generally lack significant productive or functional value (See Dudek, May 19, 2011 in Appendix B). Therefore, all four wetland ESHAs at the site meet the criteria of CE 3.5 (a), and may be impacted (filled) by the project, providing the loss is mitigated as outlined in CE 3.6. The loss of 0.052 acres of wetland ESHAs is therefore significant.

**Impact BIO 3: The project would result in potential indirect effects on water quality within downstream ESHAs.**

**Significance Before Mitigation: Potentially Significant**

The potential exists for the project to result in indirect impacts to downstream ESHAs. The Devereux Slough is downstream from the project site, and is designated as ESHA by the University of California, Santa Barbara's Long Range Development Plan (September, 2010). Development of the project would remove existing vegetation and increase the amount of

impervious surfaces at the project site, which would increase the quantity and affect the quality of stormwater runoff reaching downstream waterbodies, including the Devereux Slough. Pollutants (e.g., sediment, hydrocarbons, heavy metals, herbicides, and fertilizers) could be transported in stormwater runoff as a result of temporary construction activities and routine human activities during the operational phase of the project. Pollutants from the project could degrade water and soil quality in sensitive wetland habitats and natural communities at the Devereux Slough, as well as indirectly impact sensitive wildlife and vascular plant species dependent upon the Slough.

The City's Stormwater Management Plan (SWMP), approved through the Central Coast Regional Water Quality Control Board (RWQCB) in compliance with the 1972 Clean Water Act, establishes measures and practices to reduce the discharge of pollutants and to protect downstream water quality. Compliance with the City's SWMP with respect to construction period discharges and long-term operational discharges would be required. The project includes a stormwater collection and treatment system that includes Best Management Practices (BMPs) to reduce stormwater quality impacts, as described in Section 4.8 *Hydrology and Water Quality*. However, until the project has demonstrated compliance with the SWMP, impacts are considered potentially significant.

***Impact BIO 4: Introduction of invasive exotic species in the project's landscaping could be dispersed into ESHAs.***

***Significance Before Mitigation: Potentially Significant***

Invasive exotic species introduced as landscaping could be dispersed by stormwater, wind, or wildlife, or by various other means to natural habitats in the area, including ESHAs such as the Devereux Slough. Invasive species could outcompete native plants and disrupt normal ecological processes, reducing biological diversity and potentially threatening the quality of natural habitats.

Comparison of the Suggested Plant Palette on the project's Conceptual Landscape Plan with the California Invasive Plant Inventory (California Invasive Plant Council 2006, 2007) indicates the following suggested plants are invasive: Pride of Madeira (*Echium candicans*) and purple fountain grass (*Pennisetum setaceum*). In addition, a suggestion for the bio-swale includes unspecified "sedge" (*Carex* spp.), which implies more than one species. Selected species of *Carex* could potentially be introduced species, and potentially invasive, especially in wetlands. Prior to mitigation that would reduce project level impacts of invasive species to native habitats, including downstream ESHAs, to less than significant levels, introduction of invasive plant species would be a potentially significant impact.

**Protected Native Trees<sup>16</sup>**

***Impact BIO 5: The project would remove a protected oak tree.***

***Significance Before Mitigation: Potentially Significant***

The City of Goleta General Plan/Coastal Land Use Plan Conservation Element Policy CE 9 provides for the protection of native trees. According to the policy, new development shall be sited and designed to preserve native oaks (*Quercus* spp.), walnut (*Juglans californica*), sycamore (*Platanus racemosa*), cottonwood (*Populus* spp.), willows (*Salix* spp.), or other native trees that are not otherwise protected in ESHAs. Coast live oak trees of specimen size

<sup>16</sup> -Addresses Threshold "e."

(generally with a diameter of at least 6 inches about 4.5 feet above soil level [dbh]) are protected under this policy because these trees provide important habitat and food resources to many other species. A single mature coast live oak tree, which meets the necessary criteria to be considered a protected tree pursuant to the City of Goleta General Plan/Coastal Land Use Plan, would be impacted by the project. This tree is referred in the arborist report for the project site as tree #60 (Tree Concern, October 1, 2009) and is mapped in Figure 4.3-1. According to the arborist report, the critical root zone of this tree would be encroached upon by more than 75 percent, which is anticipated to necessitate removal of the tree. The encroachment into the critical root zone or the removal of the protected oak tree by the project would be considered a significant impact.

### **Sensitive Wildlife Species and Habitat<sup>17</sup>**

***Impact BIO 6: The project would involve construction and removal of habitat at a site that may be used for foraging by sensitive species.***

#### ***Significance Before Mitigation: Less Than Significant***

Sensitive wildlife species with potential to occur at the project site are limited to some species of birds and mammals listed as California Fully Protected (CFP) or Species of Special Concern (CSC) by the State of California. Sensitive species, especially birds of prey, may forage at the project site, include sharp-shinned hawk, Cooper's hawk, northern harrier, ferruginous hawk, white-tailed kite, short-eared owl, and burrowing owl. Other sensitive bird species that may forage on the site include loggerhead shrike, black swift, Vaux's swift, yellow warbler, yellow-breasted chat, and grasshopper sparrow. However, none of these are expected to nest on the project site. A number of sensitive bat species potentially forage aerially over the project site. These include long-tongued bat, western red bat, spotted bat, Townsend's big-eared bat, pallid bat, big free-tailed bat, and western mastiff bat. None of these is expected to roost, aestivate or hibernate on the project site. Sensitive wildlife species with potential to occur would be capable of escaping harm during vegetation removal and grading/construction activities. Therefore, the project is not expected to directly harm sensitive wildlife species at the site.

There are no historical or active raptor nests or communal roosts at the project site or within 100 feet of the project site. No sensitive or non-sensitive raptors have potential to nest at the project site due to lack of suitable nesting habitat and proximity to development, noise, and human activities, or because the project site is outside of the species' current breeding range. The project site also lacks habitat for turkey vulture or white-tailed kite communal roosts. Therefore, development of the project would not substantially reduce or eliminate quantity or quality of raptor nesting or communal roosting areas.

On an incremental basis, the project would result in the permanent loss of approximately 21.7 acres of suitable foraging habitat for raptors. The foraging habitat at the project site is not essential for the successful breeding of raptors nesting in the Goleta area. Therefore, development of the project would not substantially limit reproductive capacity of raptors through loss of foraging habitat. Also, the project site is of lower importance to raptors when compared to the larger and more diverse natural habitats in the Goleta area. For example, suitable foraging habitat exists at Ellwood Mesa, Bishop Ranch, Los Carneros Lake, Santa Barbara Municipal Airport and Goleta Slough, and UCSB areas, as well as at additional undeveloped private lands. Raptors are mobile species with generally large home ranges that are capable of compensating for the loss of small acreages of foraging habitat in a local area by moving to other suitable foraging habitats. The sensitive white-tailed kite, for example, is known to forage

<sup>17</sup> -Addresses Thresholds "a", "d", "g", "h", "l", "k."

up to tens of kilometers from communal roost sites, and may become nomadic in response to food shortages. Therefore, development of the project would not substantially eliminate raptor foraging areas or access of raptors to food resources. Impacts to raptors from the loss of suitable habitat are less than significant.

### **Nesting Birds<sup>18</sup>**

***Impact BIO 7: The project would involve vegetation removal and construction activities that may affect nesting birds.***

***Significance Before Mitigation: Potentially Significant***

Vegetation removal and grading, if conducted during the nesting bird season (February 1 to August 31) would have the potential to result in the loss of trees and shrubs that could contain active bird nests. In addition, grading would also affect herbaceous vegetation that could support ground-nesting species. Project activities that result in the loss of bird nests, eggs, and young, would be in violation of one or more of California Fish and Game Code sections 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 other birds listed by the federal Migratory Bird Treaty Act of 1918 (MBTA), whether nest damage was due to vegetation removal or to other construction activities, would be considered a violation of the MBTA and California Fish and Game Code Section 3511, and therefore would be a potentially significant impact.

### **Wildlife Movement<sup>19</sup>**

The project site does not serve as an important corridor or pathway for wildlife movement, either to or from the project site and other areas. Opportunities for movement are highly constrained by urban development, busy surface thoroughfares, railroad, freeway, impervious fencing, and lack of suitable nearby connections to off-site wildland areas. Therefore, the project would not impact important wildlife movement.

## **4.3.4 Cumulative Impacts**

### **Cumulative Effects on ESHAs<sup>20</sup>**

***Impact BIO 8: The project would contribute to potential cumulative impacts to wetland resources in the Goleta area.***

***Significance Before Mitigation: Potentially Significant***

The project and related projects in the Goleta area, as identified in Section 3.0, may potentially result in significant cumulative impacts from the removal and fill of wetland ESHAs. Prior to mitigation that would assure that project's impacts to wetland ESHAs are reduced to less than significant levels the project's contribution would be cumulatively considerable and, therefore, significant.

<sup>18</sup> -Addresses Thresholds "a", "d", "g", "h", "l."

<sup>19</sup> -Addresses Thresholds "d", "e", "i", "k."

<sup>20</sup> -Addresses Thresholds "a", "b", "c", "e", "f", "g", "k", "l."



***Impact BIO 9: The project would contribute to potential cumulative effects on water quality within downstream ESHAs.***

***Significance Before Mitigation: Potentially Significant***

The project and related projects in the Goleta area, as identified in Section 3.0, would potentially result in significant cumulative impacts to ESHA due to degraded stormwater runoff. Stormwater runoff from the completed project ultimately would discharge into Devereux Slough, considered to be an ESHA, through an underground drainage system. Prior to mitigation that would assure that project's impacts due to degraded stormwater runoff are reduced to less than significant levels in compliance with the City's SWMP the project's contribution would be cumulatively considerable and, therefore, significant.

***Impact BIO 10: The project would contribute to potential cumulative effects associated with the introduction of invasive exotic species.***

***Significance Before Mitigation: Potentially Significant***

The project and related projects in the Goleta area, as identified in Section 3.0, would potentially result in significant cumulative impacts to ESHAs due to the spread of invasive species. Prior to mitigation that would reduce project level impacts of invasive species to downstream ESHAs to less than significant levels, the project's contribution would be cumulatively considerable and, therefore, significant.

***Cumulative Loss of Raptor Foraging Habitat<sup>21</sup>***

***Impact BIO 11: The project would contribute to potential cumulative impacts on raptor foraging habitat.***

***Significance Before Mitigation: Less than Significant***

The project would not result in the incremental loss of suitable nesting or roosting habitat for raptors. Therefore, the project would not contribute to a cumulative impact to raptor nesting or roosting habitat. The project and several related projects in the Goleta area would result in the loss of suitable foraging habitat for raptors, including but not limited to non-native grassland, open scrubland, and disturbed/ruderal fields. The projects would not result in a cumulative impact to raptor foraging areas or access to food resources, as the foraging habitat at the project site is of lesser importance to raptors at a regional scale due to its fragmented condition and proximity to existing development; the foraging habitat at the site is not essential to successful nesting of raptors in the Goleta area; suitable foraging habitat exists at several other locations in the area, such as Ellwood Mesa, Bishop Ranch, Los Carneros Lake, Santa Barbara Municipal Airport and Goleta Slough, and UCSB areas, as well as additional undeveloped private lands; and, raptors are mobile species capable of compensating for the loss of small acreages of suitable foraging habitat in a local area by finding and utilizing other suitable habitats. The project's contribution (21.7 acres would be permanently removed by development of the project) to the loss of raptor habitat is not cumulatively considerable and therefore less than significant.

<sup>21</sup> -Addresses Thresholds "a", "d", "j", "k."

### 4.3.5 Mitigation Measures

#### **Impact BIO 1: The project may result in direct removal of southern tarplant.**

**BIO 1-1 (Recommended):** If southern tarplant is observed during pre-construction monitoring, the seeds ~~shall~~ must be collected and sown into the edge of the proposed bioswale, once constructed. Seeds should be kept in secure brown paper bag under cool, dry conditions until after the bioswale is prepared for landscaping. The storage area should be rodent free.

**Plan Requirements and Timing:** A qualified biologist ~~shall~~ must conduct a field survey for southern tarplant at least 14 days ~~before the start of ground disturbance activities associated with grading or construction~~ prior to construction or site preparation activities. The biologist ~~shall~~ must submit a biological report regarding the southern tarplant survey results to the Planning and Environmental Services Director, or designee, for review and approval prior to before authorization is granted to start ground disturbance activities associated with site preparation or grading or construction. If southern tarplant is found at the site, the area(s) containing southern tarplant ~~shall~~ must be demarcated and avoided by grading or construction activities until the plants have produced seeds and senesced and the seeds have been collected.

**Monitoring:** The Planning and Environmental Services Department Director, or designee, will ~~shall~~ review any biological reports in consultation with resource/trustee agencies, as needed, such as the USFWS and CDFG, before the City issues a LUP for grading. ~~— If southern tarplant is found at the site,~~ Periodic monitoring shall ~~must~~ be conducted by a qualified biologist to ensure verify plants are not impacted by construction activities until the plants have produced seeds and senesced and the seeds have been collected.

#### **Impact BIO 2: The project would result in direct removal of wetlands.**

**BIO 2-1:** The removal and filling of 0.052 acres of City of Goleta wetlands ~~shall~~ requires creation of an onsite “natural” bioswale vegetated with appropriate native plants at a 3:1 ratio (approx. 6,795 square feet). This ~~shall~~ must be accomplished within an onsite open space area. The bioswale ~~shall~~ must be designed to satisfy Regional Water Quality Control Board, Central Coast Region ~~—(RWQCB)~~ permit requirements for non-point source pollution. If southern tarplant is found onsite, seeds from southern tarplant collected onsite ~~shall~~ must be sown into the bioswale.

**Plan Requirements and Timing:** The permittee must develop a mitigation plan using shall be developed by a qualified biologist, restoration ecologist, or resource specialist and be approved by the Planning and Environmental Services ~~Department Director, or designee,~~ and relevant Regulatory Agencies before the City issues prior to issuance of a Land Use Permit for grading permit for the project. The Mitigation Plan must shall be reviewed by the County Fire Department for potential fuel modification requirements of the Department (MM PS 1-2). The plan must shall at a minimum ~~include~~ include:

- Description of the bioswale location
- Specific objectives

- Plant palette
- Implementation plan
- Success criteria
- Required maintenance activities
- Monitoring plan
- Contingency measures

Pale spike rush (*Eleocharis macrostachya*) and California meadow barley (*Hordeum branchyantherum* ssp. *californicum*) ~~shall~~ must be among those species planted in the bioswale, as feasible. Construction of the bioswale including initial planting of vegetation ~~shall~~ must be completed before the City issues a certificate of occupancy prior to issuance of an occupancy permit for the project.

**Monitoring:** The bioswale mitigation project ~~shall~~ must be monitored for a five-year period. Five years after implementation of the mitigation project, a final report ~~shall~~ must be submitted to the Planning and Environmental Services Director, or designee, Department and relevant Regulatory Agencies, which ~~shall~~ must at a minimum discuss the implementation, monitoring, and management of the mitigation project over the five-year period, and indicate whether the bioswale creation has been successful based on established success criteria.

***Impact BIO 3: The project would result in potential indirect effects on water quality within downstream ESHAs.***

Impact BIO 3 would be mitigated by water quality mitigation measures included in Section 4.8 *Hydrology and Water Quality*.

***Impact BIO 4: Introduction of invasive exotic species in the project's landscaping could be dispersed into ESHAs.***

**BIO 4-1:** Only non-invasive ornamental plant species or appropriate native plant species ~~can~~ shall be used for landscaping in future development of the project site. Excluded species ~~shall~~ include, but are not ~~be~~ limited to, those listed as problematic and/or invasive by the California Native Plant Society, the California Invasive Plant Council, or which are listed as 'noxious weeds' by the State of California or the US Federal Government. The permittee must ~~shall~~ submit a Revised Landscaping Plan, which will ~~shall~~ be reviewed by a ~~City of Goleta approved~~ qualified biologist or restoration ecologist approved by the Planning and Environmental Services Director, or designee, to exclude all potentially invasive ornamental species. Pride of Madeira (*Echium candicans*), and purple fountain grass (*Pennisetum setaceum*) ~~shall~~ are among those species excluded from use in landscaping. Sedges (*Carex* spp.) used for bio-swales, and other wetland species ~~shall~~ must be selected among those native to the Goleta area.

**Plan Requirements and Timing:** The Landscape Plan ~~shall~~ must include a plant pallet that complies with the species approved by a qualified City approved biologist approved by the Planning and Environmental Services Director, or designee. The Landscape Plan ~~shall~~ must be approved before the City issues

~~any prior to Land Use Permit/grading Permit. The project must comply with the approved plant palette shall be adhered to throughout the life of any the development.~~

**Monitoring:** ~~The Planning and Environmental Services Director, or designee~~Department, in consultation with a ~~City-~~approved biologist, ~~shall must~~ conduct site inspections to ~~ensure verify~~ the appropriate plant materials have been planted and are maintained through the life of the project.

***Impact BIO 5: The project would remove a protected oak tree.***

**BIO 5-1:** The permittee ~~shall must~~ offset the impacts to protected native trees pursuant to the City of Goleta General Plan/Coastal Land Use Plan Conservation Element policy CE 9.5. CE 9.5 requires that mitigation for impacts to protected native trees include, at a minimum, the planting of replacement trees on-site, if suitable area exists on the subject site, or off-site if suitable on-site area is unavailable. Impacts to the protected native trees ~~shall must~~ be offset at a 10:1 ratio with 1-gallon oaks or at a 3:1 ration with 24-inch box oaks.

**Plan Requirements and Timing:** ~~Prior Before the City issues to approval of any Land Use Permit, the permittee shall must submit an Oak Tree Replacement Plan that includes monitoring and success criteria to the Planning and Environmental Services Director, or designee, City for approval. The permittee shall must post a performance security mechanism in an amount acceptable to the City Planning and Environmental Services Director, or designee, to ensure compliance with the Oak Tree Replacement Plan.~~

**Monitoring:** A certified arborist ~~approved by the Planning and Environmental Services Director, or designee, acceptable to the City shall must~~ conduct site inspections during construction and tree replacement to ~~ensure verify~~ compliance with the Oak Tree Replacement Plan. Monitoring of replacement tree success, and maintenance of the performance security, ~~shall must~~ continue until the success criteria as defined in the Oak Tree Replacement Plan are achieved.

***Impact BIO 6: The project would involve construction and removal of habitat at a site that may be used for foraging by sensitive species of raptors.***

This impact would be less than significant; therefore, mitigation measures are not required.

***Impact BIO 7: The project would involve vegetation removal and construction activities that may affect nesting birds.***

**BIO 7-1:** ~~To avoid impacts to native nesting birds, the permittee and/or its contractors must retain a qualified biologist, approved by the Planning and Environmental Services Director, or designee, to conduct nest surveys in potential nesting habitat within the project site before construction or site preparation activities. Specifically, 30 days before the start of ground disturbance activities associated with grading or construction, No earlier than one month prior to construction and on a weekly basis until the start of construction or site preparation activities that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically February 1 through August 31), the qualified~~

~~biologist must conduct weekly a City-approved biologist shall perform~~ bird field surveys to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act (MBTA), and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the construction zone or within ~~3500 feet (500 feet for raptors)~~ of the construction zone. Surveys for special-status bird species can be conducted concurrently with general nesting bird surveys. Because many birds known to use the project area (including Cooper's hawk and loggerhead shrike) nest during the late winter, breeding bird surveys must be carried out both during the typical nesting/breeding season (mid-March through September) and in January and February. The surveys must continue on a weekly basis, with the last survey being conducted no more than 3 days before initiation of clearance or construction work. If ground disturbance activities are delayed, then additional pre-construction surveys will be conducted such that no more than three days will have elapsed between the last survey and the commencement of ground disturbance activities. Surveys must include examination of trees, shrubs, and the ground within grassland for nesting birds, as several bird species known to occur in the area and the project site are shrub or ground nesters, including burrowing owl, California horned lark, and mourning dove. In the event that an active nest(s) is (are) found within the survey area, construction activities within the ~~5300-foot (500-foot for raptors)~~ radius shall ~~must~~ stop until consultation with the City, CDFG, and USFWS (when applicable, i.e. if the nesting birds are listed under the federal Endangered Species Act), is conducted and an appropriate setback can be established. A fence barrier shall ~~must~~ be erected around the buffer and clearing and construction within the fenced area shall ~~must~~ be postponed or halted, at the discretion of a biological monitor, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting.

**Plan Requirement:** Grading Plans shall ~~must~~ include the notes specifying the requirement for a biological field survey for nesting birds. All plans shall ~~must~~ be revised, as necessary, to reflect setbacks and barrier fence details used to establish sensitive biological areas.

**Timing:** A qualified biologist, approved by the Planning and Environmental Services Director, or designee, must shall-conduct a field survey no earlier than ~~one month~~ 30 days before the start of ground disturbance activities associated with grading or construction prior to construction and on a weekly basis until the start of construction or site preparation activities and during construction in the event that an active nest(s) is (are) found within the survey area. The biologist report shall be submitted to the Planning and Environmental Services Director, or designee, Department Development for review prior ~~before~~ the issuance of any LUP ~~to for site preparation or grading.~~

**Monitoring:** The Planning and Environmental Services ~~Department~~ Director, or designee, will shall review any biological reports in consultation with resource/trustee agencies, as needed, such as the USFWS and CDFG. ~~As~~ if deemed necessary by the Planning and Environmental Services Director, or designee, monitoring by a qualified biologist shall ~~will~~ be conducted and setbacks shall ~~will~~ be maintained throughout the construction period.

***Impact BIO 8: The project would contribute to potential cumulative impacts to wetland resources in the Goleta area.***

Impact BIO 8 would be mitigated with implementation of Mitigation Measure BIO 2-1, above.

***Impact BIO 9: The project would contribute to potential cumulative effects on water quality within downstream ESHAs.***

Impact BIO 9 would be mitigated by water quality mitigation measures included in Section 4.8 *Hydrology and Water Quality*.

***Impact BIO 10: The project would contribute to potential cumulative effects associated with the introduction of invasive exotic species.***

Impact BIO 10 would be mitigated with implementation of Mitigation Measure BIO 4-1, above.

***Impact BIO 11: The project would contribute to potential cumulative impacts on raptor foraging habitat.***

This impact would be less than significant and therefore, mitigation measures are not required.

#### **4.3.6 Residual Impacts**

Impact BIO 1 AND BIO 6 are less than significant without mitigation (**Class III**).

With implementation of the above mitigation measures, the project's impacts on biological resources (Impacts BIO 2, BIO 3, BIO4, BIO5, and BIO 7), on a project level and as contributions to cumulative impacts, would be reduced to less than significant (**Class II**).